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ABSTRACT

This compilation presents over 200 resumes of instructional materials in industrial arts which have appeared quarterly in "Abstracts of Instructional Materials in Vocational and Technical Education" (AIM), Fall 1967 through Fall 1971. Resumes cover a broad range of fields and occupations, such as cabinetmaking, construction, drafting, electronics, graphic arts, power mechanics, and woodworking. The resumes are arranged in ascending order according to an accession number and include the following information: (1) author(s), (2) title, (3) institutional source, (4) sponsoring agency, (5) grant, contract, and program area numbers, (6) report and bureau numbers, (7) available sources, (8) descriptors and identifiers which characterize the contents of the document, and (9) an abstract of the document. Author, subject, and conversion of document number indexes are included to help locate the abstracts by page number and accession number. The full texts of documents are available from the original sources or from ERIC Document Reproduction Service (EDRS) as microfiche or xerox reproductions. A sample resume and ordering information for AIM and EDRS reproduction are provided in an introductory section. (SB)

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The Center's mission is to strengthen the capacity of state educational systems to provide effective occupational education programs consistent with individual needs and manpower requirements by:

- Conducting research and development to fill voids in existing knowledge and to develop methods for applying knowledge.
- Programmatic focus on state leadership development, vocational teacher education, curriculum, vocational choice and adjustment.
- Stimulating and strengthening the capacity of other agencies and institutions to create durable solutions to significant problems.
- Providing a national information storage, retrieval and dissemination system for vocational and technical education through the affiliated ERIC Clearinghouse.

Bibliography Series No. 13

INDUSTRIAL ARTS EDUCATION

INSTRUCTIONAL MATERIALS

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a compilation of abstracts from
ABSTRACTS OF INSTRUCTIONAL MATERIALS
IN VOCATIONAL AND TECHNICAL EDUCATION
1967 - 1971

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

1972

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A FINAL REPORT

ON A PROJECT CONDUCTED UNDER

Project No. 7-0158

GRANT NO. OEG-3-7-000158-2037

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U.S. DEPARTMENT OF
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PREFACE

Finding and using relevant information frequently is a major task for curriculum specialists, teachers, administrators and students. The Center for Vocational and Technical Education is dedicated to make useful and vital information accessible so that educators may use it to improve school practices.

The Center has assembled, under one cover, instructional materials specific to the field of industrial arts education. These items, in the form of abstracts, are selections from Abstracts of Instructional Materials in Vocational and Technical Education (AIM). Since 1967, The Center has presented AIM quarterly, in the form of collections of abst cts of documents from all areas of vocational and technical education.

Other publications in the series, of which this is a part, include compilations of abstracts of instructional materials for agricultural education, business and office education, distributive education, health occupations education, home economics education, and trade and industrial education. Compilations of instructional materials on any topic from the AIM document collection now are feasible and plans are being developed for possible future publication on such topics as occupational clusters, educational levels, and special problem areas.

Members of the profession are encouraged to forward instructional materials for possible inclusion in future issues of AIM to the Acquisitions Specialist at The Center. We are indebted to our colleagues in industrial arts education for providing us instructional materials for past issues of AIM. We also appreciate the contributions of instructional materials laboratories, local school systems and professional associations such as the Vocational Instructional Materials (VIM) section of the American Vocational Association.

We hope that this publication will prove valuable to you in your particular educational endeavors.

Robert E. Taylor
Director
The Center for Vocational and
Technical Education

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INTRODUCTION

Instructional materials for industrial arts education that have appeared quarterly in Abstracts of Instructional Materials in Vocational and Technical Education (AIM) between the Fall 1967 and Fall 1971 issues are presented in this single volume for your convenience.

This compilation of abstracts of over 200 documents in your field includes such specific areas as: cabinetmaking, construction (process), drafting, electronics, graphic arts, manufacturing, metals, power mechanics, and woodworking.

The indexes help you to locate the abstracts by page numbers and VT numbers. Index terms used in the subject index are ERIC descriptors. Each document has been assigned several of these descriptors; therefore, each document title appears in the subject index several times.

An abstract presents information about a document's content to help you to decide if you want to read the full text of the document. The abstract is part of the resume which provides information about the document, its source and availability. Abstracts are arranged in ascending VT-number order. A sample resume, following this Introduction, is explained in detail.

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VT 013 122 ED 052 327

If ED is followed by numbers, item has been announced in Research in Education. If ED is not followed by numbers, the issue of RIE in which the abstract is scheduled to appear follows the ED prefix.

Author(s)

Richards, F.L.

Outlines of Courses in Ornamental Horticulture.

Title.

Pennsylvania State Univ., University Park. Dept. of Agricultural Education.
Office of Education (DHEW), Washington, D.C. Div. of Adult, and Vocational Research.

Institutional source--the organization responsible for the report.

Sponsoring agency--appears here when different from Institutional source.

Report Number and Bureau Number would appear here.

Teacher-Educ-Ser-v12-n1

Publication date and total number of printed pages.

Department of Agricultural Education, Pennsylvania State University, University Park, Pennsylvania 16802 ($1.00).

Grant Number, Contract Number, and Program Area Number would appear here.

Pub Date - 71 56p.

Available source(s) if known at time of printing. Cost is included.

Identifier, if any -- acronyms, geographical areas, organizations, tests (e.g. Binet), etc. Only major identifiers preceded by an asterisk are in the index.

DESCRIPTORS - *AGRICULTURAL EDUCATION; *CURRICULUM GUIDES; *ORNAMENTAL HORTICULTURE; HIGH SCHOOLS; *POST SECONDARY EDUCATION; LANDSCAPING; NURSERIES (HORTICULTURE); TURF MANAGEMENT; *TECHNICAL EDUCATION

Descriptors--subject terms assigned to characterize substantive contents. Only the major terms, those preceded by an asterisk, are printed in the index.

Abstract -- a condensation of the report. When applicable, it includes the purpose, means of development, teacher competency, student requirements, and description of supplementary materials if available.

ABSTRACT - Intended to suggest subject matter content of courses or programs in ornamental horticulture for high school and postsecondary vocational-technical programs, this curriculum guide was prepared by staff members of the Agricultural Education Department at the Pennsylvania State University, and tested in a workshop with vocational agriculture teachers. Contents are: (1) Outlines of Courses in Ornamental Horticulture, (2) Ornamental Horticulture Programs for Grades 10, 11, and 12, (3) Nursery Production . . . The content is presented in outline form under each topic, and is applicable to the United States and lower Canada. (GB)

Abstractor's initials.

SUBSCRIPTIONS TO AIM

Abstracts of Instructional Materials in Vocational and Technical Education (AIM), upon which this publication is based, may be ordered by subscription at $11.00 for one year, $18.00 for two years, or $27.00 for three years. Back orders are available beginning with the Fall 1968 issue. These back issues provide indexes to, and abstracts of, instructional materials for all of the occupational service areas.

Volume 5, Number 1 (1972) will announce instructional materials not covered by previous issues or in this publication.

Subscription orders, accompanied by check or purchase order, may be placed with:

AIM
The Center for Vocational and Technical Education
1900 Kenny Road
Columbus, Ohio 43210

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ABSTRACTS

VT 000 017 ED 026 449
PADHAM, ELWOOD
INDUSTRIAL ARTS AND TECHNOLOGY IN MAINE, A STUDY OF AMERICAN INDUSTRY. A GUIDE FOR SECONDARY SCHOOLS IN MAINE .

MAINE STATE DEPT. OF EDUCATION, AUGUSTA.
BUREAU OF VOCATIONAL EDUCATION
PUB DATE - 65 361P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; CURRICULUM PLANNING; *SECONDARY GRADES; EDUCATIONAL EQUIPMENT; EDUCATIONAL OBJECTIVES; BIBLIOGRAPHIES
IDENTIFIERS - *MAINE

ABSTRACT - THIS STATE CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS PERSONNEL IN GRADES SEVEN THROUGH 12. IT WAS DEVELOPED BY 15 AREA GROUPS AND TWO SUMMER WORKSHOPS IN A SERIES OF STEPS INCLUDING PROPOSED OUTLINES, DISCUSSION MEETINGS, CONTENT AND METHOD LISTINGS FOR EACH GRADE, AND TEACHING UNIT DEVELOPMENT. THE CONTENTS ARE ORGANIZED BY GRADES UNDER THESE HEADINGS: (1) MANUFACTURING INDUSTRIES GRADES 7,8, AND 9, (2) MANUFACTURING AND CONSTRUCTION INDUSTRIES GRADE 10, (3) POWER AND TRANSPORTATION INDUSTRIES GRADE 12. EACH SECTION GIVES GENERAL AND SPECIFIC OBJECTIVES, SUGGESTED ACTIVITIES, TEACHER'S APPROACH, AND RESOURCE MATERIALS. TIME ALLOTMENT VARIES FROM 2 HOURS PER WEEK IN GRADE 7 TO 7 HOURS PER WEEK IN GRADES 11 AND 12. THE CONTENT IS DESIGNED TO EXPOSE THE AVERAGE PUPIL TO A WIDE VARIETY OF MATERIALS, TOOLS, PROCESSES, PRODUCTS, AND OCCUPATIONS OF MODERN INDUSTRY. SUPPLEMENTARY MATERIALS INCLUDE A SUGGESTED TOOL AND EQUIPMENT LIST FOR TYPICAL JUNIOR AND SENIOR HIGH SCHOOL GENERAL SHOPS. (EM)

VT 000 239
INDUSTRIAL ARTS SUPPLEMENT. CAREER GUIDANCE SERIES. CURRICULUM BULLETIN, 1967-68 SERIES, NO. 3D.

NEW YORK CITY BOARD OF EDUCATION, N.Y.
BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 ($4.00).
PUB DATE - 67 197P.

DESCRIPTORS - *INDUSTRIAL ARTS; *RESOURCE GUIDES; *RESOURCE MATERIALS; CONSTRUCTION INDUSTRY; POWER MECHANICS; *LESSON PLANS; *TEACHING PROCEDURES; PRINTING; MAINTENANCE; WORKSHEETS; JUNIOR HIGH SCHOOL STUDENTS
IDENTIFIERS - *CAREER GUIDANCE SERIES

ABSTRACT - THIS RESOURCE GUIDE OFFERS INDUSTRIAL ARTS TEACHERS PROJECT IDEAS AND GUIDES FOR DEVELOPING SHOP ACTIVITIES IN THE FOLLOWING MAJOR INDUSTRIAL AREAS: GENERAL CONSTRUCTION AND REPAIR, BUILDING CONSTRUCTION AND MAINTENANCE, POWER MECHANICS, AND IN-PLANT PRINTING. THE PROJECTS IN EACH AREA INCLUDE MATERIALS AND EQUIPMENT LISTS, VISUAL AIDS, PROCEDURES, OUTCOMES, REFERENCES, AND ASSIGNMENTS. THE GUIDE ALSO CONTAINS PLANS AND SUGGESTIONS FOR ORGANIZING A MULTI-AREA SHOP TO PROVIDE THE PUPILS WITH A DIVERSIFIED PROGRAM OF SHOP EXPERIENCES. TWENTY-NINE OPERATION SHEETS ARE APPENDED. THIS GUIDE IS TO BE USED IN CONJUNCTION WITH "INDUSTRIAL ARTS" AVAILABLE AS VT 001 359 (ALSO IN THIS ISSUE). (GR)

VT 000 306
INFORMATION ON HAND TOOLS FOR METALWORKING TRADES.

TEXAS UNIV., AUSTIN. DEPT. OF INDUSTRIAL EDUCATION
TEXAS EDUCATION AGENCY, AUSTIN. INDUSTRIAL EDUCATION DIV.
INDUSTRIAL EDUCATION DEPARTMENT, DIVISION OF EXTENSION, THE UNIVERSITY OF TEXAS, AUSTIN, TEXAS 78712 ($2.50).
PUB DATE - NOV57 127P.

DESCRIPTORS - *TEXTBOOKS; *TRADE AND INDUSTRIAL EDUCATION; *METAL WORKERS; *HAND TOOLS; HIGH SCHOOLS

ABSTRACT - THIS TEXTBOOK IS FOR STUDENT USE IN A BEGINNING GENERAL METAL SHOP COURSE AT THE HIGH SCHOOL LEVEL. IT WAS DEVELOPED BY AN INSTRUCTOR AND AN ADVISORY COMMITTEE. IT COVERS (1) HAND HACKSAWS, (2) FILES, (3) HAMMERS, (4) CHISELS AND PUNCHES, (5) VISES AND CLAMPS, (6) MEASURING TOOLS, (7) LAYOUT TOOLS, (8) WRENCHES, (9) PLIERS, (10) SCREWDRIVERS, (11) DRILLS, (12) HAND THREADING TOOLS, (13) REAMERS, (14) SOLDERING COPPERS AND BLOWTORCHES, AND (15) GAUGES. IT IS ILLUSTRATED WITH LINE DRAWINGS AND PHOTOGRAPHS OF THE TOOLS AND THEIR PROPER USE. TESTS COVERING THIS MATERIAL ARE AVAILABLE IN "TESTS ON HAND TOOLS FOR METALWORKING TRADES" (VT 000 307) FOR 90 CENTS. (EM)

VT 000 333
KLEHM, WALTER A., ED., AND OTHERS
GUIDELINES FOR INDUSTRIAL ARTS INSTRUCTION. GRADES VII-XII. SUBJECT FIELD SERIES BULLETIN D-SIX.

ILLINOIS STATE DEPT. OF PUBLIC INSTRUCTION, SPRINGFIELD
OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION, 316 SOUTH SECOND STREET, SPRINGFIELD, ILLINOIS 62706 (NO CHARGE).
PUB DATE - 64 270P.

DESCRIPTORS - *CURRICULUM GUIDES; *TEACHING GUIDES; *INDUSTRIAL ARTS; SECONDARY GRADES; CURRICULUM PLANNING

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE OF INDUSTRIAL ARTS TEACHERS, SUPERVISORS, AND TEACHER EDUCATORS FOR USE BY TEACHERS. CHAPTERS ARE: (1) THE PROBLEM AND PROCEDURE, PROVIDING A GLOSSARY OF PERTINENT TERMS, (2) POINT OF VIEW, GIVING EDUCATIONAL OBJECTIVES AND THE FUNCTION AND PLACE OF INDUSTRIAL ARTS, (3) THE INDUSTRIAL ARTS PROGRAM, DESCRIBING THE CONTRIBUTIONS, STUDENT EXPERIENCES, DEVELOPMENTAL BEHAVIORAL OBJECTIVES, HORIZONTAL AND VERTICAL ORGANIZATIONS, AND TYPICAL COURSE ORGANIZATIONS, (4) THE SELECTION OF LEARNING EXPERIENCES, PRESENTING SUGGESTED CONTENT FOR 13 JUNIOR HIGH SCHOOL COURSES AND SEVEN SENIOR HIGH SCHOOL COURSES, (5) THE ORGANIZATION OF LEARNING EXPERIENCES,

DISCUSSING COURSE PLANNING, TEACHING METHODS, AND INSTRUCTIONAL AIDS, (6) THE MANAGEMENT OF INSTRUCTION, EXPLAINING LABORATORY AND STUDENT ORGANIZATION AND MANAGEMENT, AND (7) EVALUATING INSTRUCTION IN INDUSTRIAL ARTS, GIVING THE CHARACTERISTICS AND OBJECTIVES OF EVALUATION. MOST CHAPTERS INCLUDE A LIST OF REFERENCES. THE DOCUMENT WAS PLANNED TO BE SUGGESTIVE RATHER THAN PERSCRIPTIVE AND TO SERVE AS A SOURCE OF PRACTICAL HELP REFLECTING RESEARCH FINDINGS. IT COVERS BOTH JUNIOR AND SENIOR HIGH SCHOOL INDUSTRIAL ARTS. ILLUSTRATIONS ARE LINE DRAWINGS AND PHOTOGRAPHS. (EM)

VT 000 398
CREIGHTON, WILLIAM H., JR., AND OTHERS
INDUSTRIAL ARTS CURRICULUM GUIDE FOR ELECTRICITY IN OHIO SCHOOLS.

OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
OHIO STATE DEPT. OF EDUCATION, COLUMBUS
PUB DATE - MAR65 32P.

DESCRIPTORS - *CURRICULUM GUIDES; *ELECTRICITY; *ELECTRONICS; SECONDARY GRADES; *INDUSTRIAL ARTS

ABSTRACT - A COMMITTEE OF TEACHERS WHO HAD TAUGHT ELECTRICITY AND ELECTRONICS AT COLLEGE AND SECONDARY LEVELS PREPARED THIS GUIDE FOR BASIC COURSES AT THE JUNIOR OR SENIOR HIGH SCHOOL LEVELS. DISCUSSION TOPICS, TEACHING AIDS, DEMONSTRATIONS OR EXPERIMENTS, PROJECT ACTIVITIES, AND TEACHING AIDS ARE GIVEN FOR UNITS ON: (1) HISTORY AND OCCUPATIONS, (2) SIMPLE CIRCUITS AND HOUSEWIRING, (3) SMALL HEATING APPLIANCES, (4) MAGNETISM, (5) TRANSFORMERS, (6) FRACTIONAL HORSEPOWER MOTORS, (7) BATTERIES AND ELECTROCHEMISTRY, (8) AUTOMOTIVE ELECTRICITY, (9) TESTING EQUIPMENT AND METERS, AND (10) ELECTRONICS. REFERENCES, A TABLE OF READING ASSIGNMENTS, SOURCES FOR VISUAL AIDS, EQUIPMENT, SUPPLIES, AND A SUGGESTED EQUIPMENT INVENTORY ARE INCLUDED. (EM)

VT 000 467
GRAPHIC ARTS.

SAINT PAUL PUBLIC SCHOOLS, MINN. CURRICULUM OFFICE
PUBLICATION NO. 296
PUB DATE - 64 206P.

DESCRIPTORS - *CURRICULUM GUIDES; SECONDARY GRADES; JUNIOR HIGH SCHOOLS; GLOSSARIES; *GRAPHIC ARTS; *INDUSTRIAL ARTS

ABSTRACT - THIS GUIDE WAS DEVELOPED ESPECIALLY FOR USE IN JUNIOR HIGH SCHOOL GRAPHIC ARTS PROGRAMS. IT CONTAINS OBJECTIVES, FUNDAMENTAL OPERATIONS, RELATED INFORMATION, EQUIPMENT, STUDY OR EXAMINATION QUESTIONS, AND REFERENCES FOR THESE UNITS: (1) TYPE AND PRESSWORK, (2) PAPER AND ELEMENTARY BINDING, (3) STENCILS, (4) LINOLEUM BLOCK, (5) SILK SCREEN, AND (6) INTAGLIO. A SEVEN PAGE GLOSSARY IS GIVEN. (EM)

VT 000 506
EASTER, D. DALE, AND OTHERS
INDUSTRIAL ARTS COURSE OUTLINES, GRADES SEVEN, EIGHT, AND NINE.

CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO
PUB DATE - 65 53P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *JUNIOR HIGH SCHOOLS; *INDUSTRIAL ARTS

ABSTRACT - GUIDELINES ARE GIVEN FOR ASSISTANCE IN THE PREPARATION OF DETAILED COURSES OF INSTRUCTION AND IN SECURING IMPROVEMENT OF INSTRUCTION IN GRADES 7 OR 8 OF ELEMENTARY SCHOOLS, GRADES 7, 8, AND 9 OF JUNIOR HIGH SCHOOLS, AND GRADE 9 OF 4-YEAR HIGH SCHOOLS. SUGGESTIONS ARE INCLUDED FOR COURSES ON TWO LEVELS IN EACH OF THESE SUBJECTS: (1) DRAFTING, (2) ELECTRONICS, (3) GRAPHIC ARTS, (4) INDUSTRIAL CRAFTS, (5) METALS, (6) POWER MECHANICS, AND (7) WOODS. EACH SECTION IS COMPOSED OF TOPICS FOR STUDY, DISCUSSION, DEMONSTRATION, AND ACTIVITIES FOR EXTENSION OF KNOWLEDGE AND SKILLS. (EM)

VT 000 508
CLACK, EDWARD, AND OTHERS
INDUSTRIAL ARTS PROGRAMING FOR THE HIGH SCHOOL. (BULLETIN, NO. 2148).

MICHIGAN STATE DEPT. OF PUBLIC INSTRUCTION, LANSING
PUB DATE - 65 18P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM PLANNING; LEARNING LABORATORIES; *SENIOR HIGH SCHOOLS

ABSTRACT - OBJECTIVES FOR SENIOR HIGH SCHOOL CLASSES IN INDUSTRIAL ARTS RELATE TO CITIZENSHIP, CRAFTSMANSHIP, CULTURAL APPRECIATION, CONSUMER KNOWLEDGE, WORTHY HOME MEMBERSHIP, GUIDANCE AND EXPLORATION, OCCUPATIONAL KNOWLEDGE, AND AVOCATIONAL EXPERIENCES ARE DISCUSSED. BROAD AREAS AND ACTIVITIES ARE (1) WOODWORKING AND LAMINATES, ELECTRICITY, METAL FORMING, METAL-WORKING, DRAFTING, GRAPHIC ARTS, AND POWER MECHANICS FOR GRADE 10, (2) WOODWORKING, ELECTRICITY, METALWORKING, DRAFTING, WELDING, POWER MECHANICS, AUTO MECHANICS, FOUNDRY, AND GRAPHIC ARTS FOR GRADE 11, AND (3) WOODWORKING, ELECTRICITY, ELECTRICITY, ELECTRONICS, METALWORKING, DRAFTING, WELDING, AUTO MECHANICS, AND NEW MATERIALS AND PROCESSES FOR GRADE 12. GUIDELINES FOR SHOP PLANNING AND SHOP ORGANIZATION ARE INCLUDED ALONG WITH A BIBLIOGRAPHY. (EM)

VT 000 531
POWER . BULLETIN NO. 2149.

MICHIGAN STATE DEPT. OF PUBLIC INSTRUCTION, LANSING
STATE DEPARTMENT OF EDUCATION, P.O. BOX 928, LANSING, MICHIGAN 48904 (SINGLE COPIES WITHOUT CHARGE).
PUB DATE - 65 39P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; *ENGINES; JUNIOR HIGH SCHOOLS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY THE STATE INDUSTRIAL ARTS CURRICULUM COMMITTEE OF INDUSTRIAL ARTS TEACHERS AND PROFESSORS FOR USE BY TEACHERS IN PLANNING A ONE-SEMESTER COURSE ON POWER OR ENERGY CONVERSION AT THE JUNIOR HIGH SCHOOL LEVEL. GENERAL COURSE OBJECTIVES ARE TO (1) FAMILIARIZE THE STUDENT WITH POWER IN PRODUCING USEFUL WORK, (2) PROMOTE AN INTEREST IN THE MECHANICS OF POWER EQUIPMENT, (3) PROVIDE KNOWLEDGE OF OPERATING PRINCIPLES OF POWER PRODUCING ENGINES AND THEIR INDUSTRIAL APPLICATION, AND (4) DEVELOP CONSUMER KNOWLEDGE, AN APPRECIATION OF INDUSTRY AND ITS PRODUCTS, GOOD WORK HABITS, AND AN APPRECIATION FOR THE SAFE AND EFFECTIVE USE OF POWER. MAJOR UNITS ARE (1) INTRODUCTION AND HISTORY OF POWER, (2) MEASUREMENTS OF POWER, (3) WATER POWER, (4) WIND POWER, (5) PNEUMATICS, (6) HYDRAULICS, (7) ELECTRICITY-ELECTRONICS, (8) STEAM, (9) INTERNAL COMBUSTION, (10) SOLAR ENERGY, (11) ATOMIC POWER, AND (12) ROCKET. EACH UNIT GIVES OBJECTIVES, CLASS AND TEACHER ACTIVITIES, AND A BIBLIOGRAPHY OF REFERENCES AND TEACHING AIDS. (EM)

VT 000 549
INDUSTRIAL ARTS AND VOCATIONAL EDUCATION, SAFETY MANUAL.

OHIO INDUSTRIAL COMMISSION, COLUMBUS. DIV. OF SAFETY AND HYGIENE
OHIO STATE DEPT. OF EDUCATION, COLUMBUS
PUB DATE - AUG66 75P.

DESCRIPTORS - *SAFETY; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *RESOURCE UNITS

ABSTRACT - INDUSTRIAL ARTS AND VOCATIONAL EDUCATION TEACHERS MAY USE THIS LOOSE LEAF NOTEBOOK AS RESOURCE MATERIAL ON SHOP SAFETY. SAFETY SUGGESTIONS ARE LISTED FOR THE AREAS OF (1) AUTOMOTIVE POWER AND MECHANICS, (2) DRAFTING, (3) ELECTRICITY AND ELECTRONICS, (4) GENERAL SAFETY, (5) GRAPHIC ARTS, (6) INDUSTRIAL CRAFTS, (7) METALS, AND (8) WOOD SHOP. ALSO INCLUDED ARE A STUDENT INJURY REPORT FORM, SIX SAMPLE SAFETY POSTERS, AND A COPY OF "MONITOR," THE COMMISSION'S MONTHLY PUBLICATION. (EM)

VT 000 847
HOLT, E.E.
A GUIDE FOR INDUSTRIAL ARTS IN OHIO SCHOOLS, SECOND EDITION .

OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
OHIO STATE DEPT. OF EDUCATION, COLUMBUS
STATE DEPARTMENT OF EDUCATION, STATE OFFICE BUILDING, COLUMBUS, OHIO 43215.
PUB DATE - APR63 42P.

DESCRIPTORS - *ADMINISTRATOR GUIDES; *INDUSTRIAL ARTS; *ELEMENTARY GRADES; HIGH SCHOOLS; *CURRICULUM; ADULT EDUCATION
IDENTIFIERS - OHIO

ABSTRACT - THE PURPOSE OF THIS GUIDE IS TO REDEFINE INDUSTRIAL ARTS IN LIGHT OF THE PRESENT DAY ENVIRONMENT TO OUTLINE A PROGRAM WHICH IS BROADLY CONCEIVED TO TEACH INDUSTRY AS A PART OF THE EDUCATION OF ALL YOUTH. THE CONTENTS INCLUDE A HISTORY OF INDUSTRIAL ARTS IN OHIO, SOME RECOGNIZED PURPOSES OF EDUCATION, A STUDY OF INDUSTRY IN THE SCHOOL PROGRAM, A DEFINITION OF INDUSTRIAL ARTS, AND THE UNIQUE CONTRIBUTIONS OF INDUSTRIAL ARTS. THE PURPOSES AND SUBJECT AREAS ARE GIVEN FOR ELEMENTARY SCHOOL, JUNIOR HIGH SCHOOL, AND SENIOR HIGH SCHOOL. IMPLICATIONS FOR SPECIAL EDUCATION AND ADULT EDUCATION ARE DISCUSSED. FACTORS AFFECTING THE PROGRAM AND FACILITIES SUCH AS SCHEDULING, GROUPING, CLASS SIZE, TEACHER COMPETENCY, ARCHITECTURAL CONSIDERATIONS, SERVICE REQUIREMENTS, AND SPARE REQUIREMENTS ARE ALSO COVERED. (EM)

VT 000 887
THE PROGRAM OF INDUSTRIAL ARTS EDUCATION IN KENTUCKY. EDUCATIONAL BULLETIN, V. 31, NO. 8 .

KENTUCKY STATE DEPT. OF EDUCATION, FRANKFORT
PUB DATE - AUG63 158P.

DESCRIPTORS - *PROGRAM GUIDES; *INDUSTRIAL ARTS; *BIBLIOGRAPHIES; *TEXTBOOKS; *CURRICULUM GUIDES; SCHOOL SHOPS; HIGHNSCHOOLS; CURRICULUM
IDENTIFIERS - KENTUCKY

ABSTRACT - AS A SUMMATION OF THE BELIEFS AND CONCEPTS OF A NUMBER OF INDUSTRIAL AND PRACTICAL ARTS EDUCATORS, THIS PUBLICATION IS A USEFUL SOURCE OF PHILOSOPHY, CURRICULUM, AND TEACHING PROCEDURES FOR INDUSTRIAL ARTS EDUCATION. THE CONTENTS INCLUDE: (1) THE SCHOOL ADMINISTRATOR AND THE INDUSTRIAL ARTS PROGRAM, (2) THE MEANING AND FUNCTION OF INDUSTRIAL ARTS, (3) THE INDUSTRIAL ARTS TEACHER, (4) THE INDUSTRIAL ARTS CURRICULUM, (5) PLANNING AND EQUIPPING INDUSTRIAL ARTS LABORATORIES, (6) PROBLEM SOLVING, CREATIVITY, AND DESIGN, (7) THE COMPREHENSIVE GENERAL SHOP FOR GRADES SEVEN AND EIGHT, (8) GENERAL DRAFTING, (9) GENERAL WOODWORKING, (10) GENERAL METALS, (11) ELECTRICITY-ELECTRONICS, (12) POWER MECHANICS, (13) GRAPHIC ARTS, AND (14) GENERAL PLASTICS. THE APPENDIX CONTAINS CHAPTER BIBLIOGRAPHIES, EQUIPMENT LISTS, INSTRUCTIONAL AIDS FOR THE SUBJECT AREAS, AND AUDIO-VISUAL AIDS. (EM)

VT 000 898
INDUSTRIAL ARTS CURRICULUM GUIDE FOR SEVENTH AND EIGHTH GRADES, SUMMER, 1966.

JEFFERSON COUNTY PUBLIC SCHOOLS, LOUISVILLE, KY. DEPT. OF CURRICULUM DEVELOPMENT AND SUPERVISION
PUB DATE - 66 58P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; GRADE 7; GRADE 8; *JUNIOR HIGH SCHOOLS

ABSTRACT - THIS GUIDE WAS DEVELOPED TO ENABLE TEACHERS WITHIN THE COUNTY TO DEVELOP A UNIFORM PROGRAM THAT WILL GIVE STUDENTS GROWTH EXPERIENCES IN INDUSTRIAL ARTS. THE GUIDE INCLUDES GENERAL OBJECTIVES, SPECIFIC INSTRUCTIONS FOR USING THE CONTENT OUTLINES, AREAS OF INDUSTRIAL ARTS, CONTENT OUTLINES FOR SEVENTH AND EIGHTH GRADES, FILM

BIBLIOGRAPHY, SUGGESTIONS FOR OPENING AND CLOSING THE SCHOOL SHOP FOR THE YEAR, AND A BIBLIOGRAPHY OF TEXTS. SEVENTH GRADE SUBJECT AREAS ARE DRAWING AND PLANNING, WOODWORKING, METALWORKING, AND LEATHERWORKING. EIGHTH GRADE SUBJECT AREAS ARE DRAWING AND PLANNING, ELECTRICITY, METALWORKING, PLASTICS, AND WOODWORKING. (EM)

VT 000 969
PRINCIPLES AND PRACTICES OF TRADE AND INDUSTRIAL TEACHING (INCLUDING TECHNICAL AND INDUSTRIAL ARTS), A SYLLABUS FOR THE COURSE.

SOUTHEAST MISSOURI STATE COLL., CAPE GIRARDEAU. DEPT. OF INDUSTRIAL ARTS
PUB DATE - 66 20P.

DESCRIPTORS - *STUDY GUIDES; *TEACHER EDUCATION; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *TEACHING METHODS; TECHNICAL EDUCATION

ABSTRACT - INFORMATION ON TEACHING METHODOLOGY, PRINCIPLES, AND EVALUATIVE CRITERIA IS PROVIDED FOR TRAINING INDUSTRIAL ARTS AND TRADE AND INDUSTRIAL TEACHERS. THE MATERIAL WAS DEVELOPED BY A COLLEGE FACULTY MEMBER. REFERENCES AND STUDY QUESTIONS ARE GIVEN FOR THE UNITS: (1) BACKGROUND FOR VOCATIONAL-TECHNICAL EDUCATION, (2) THE INSTRUCTOR, (3) INDUSTRIAL ARTS, (4) TECHNICAL EDUCATION, (5) CONCEPTS AND TRENDS, (6) SHOP FACTORS AFFECTING LEARNING, (7) COURSE AND LABORATORY PLANNING, (8) INSTRUCTIONAL AIDS, (9) MANAGEMENT PROCEDURES, (10) STUDENT EVALUATION, (11) PUBLIC RELATIONS, (12) VOCATIONAL GUIDANCE, (13) REIMBURSED PROGRAMS, AND (14) PRINCIPLES OF VOCATIONAL EDUCATION. THE SUGGESTED TIME ALLOTMENT IS 72 CLOCK HOURS. GENERAL COURSE REQUIREMENTS AND A BIBLIOGRAPHY OF OUTSIDE READINGS CONTAINING MATERIAL DATED FROM 1926 TO 1966 ARE INCLUDED. (EM)

VT 000 978
INDUSTRIAL ARTS ELECTRICITY--ELECTRONICS, GRADES 7-12 .

TEXAS INDUSTRIAL ARTS ASSOCIATION
TEXAS EDUCATION AGENCY, AUSTIN
PUB DATE - OCT65 60P.

DESCRIPTORS - *INDUSTRIAL ARTS; *ELECTRICITY; *ELECTRONICS; *CURRICULUM GUIDES; JUNIOR HIGH SCHOOLS; HIGH SCHOOLS

ABSTRACT - TO HELP INDUSTRIAL ARTS TEACHERS IN ORGANIZING AND TEACHING ELECTRICITY AND ELECTRONICS, THIS GUIDE IS PRESENTED FOR USE IN GRADES 7 THROUGH 12. THE COURSES COVERED ARE: (1) INTRODUCTORY ELECTRICITY, GRADES 7 AND 8 (9 WEEKS), (2) GENERAL ELECTRICITY, GRADES 9-12 (36 WEEKS), AND (3) BASIC ELECTRONICS, GRADES 10-12 (36 WEEKS). FOR EACH OF THESE FLEXIBLE COURSES ARE GIVEN DESCRIPTION OF SUITABILITY, ORGANIZATION OF THE UNITS, RECOMMENDATIONS CONCERNING CONTENT, SUGGESTED TOPIC OUTLINE, DISCUSSION OF SUGGESTED FACILITIES AND EQUIPMENT, SUGGESTED TEXT LIST, AND SUGGESTED STUDENT ACTIVITIES. SUGGESTED GUIDES FOR SHOP PLANNING AND THREE SAMPLE FLOOR PLANS ARE ALSO GIVEN. (EM)

VT 000 979
WOODWORKING, GRADES 7-12; A TENTATIVE BULLETIN.

TEXAS INDUSTRIAL ARTS ASSOCIATION, DENTON
TEXAS EDUCATION AGENCY, AUSTIN
PUB DATE - JUN65 89P.

DESCRIPTORS - *INDUSTRIAL ARTS; *WOODWORKING; *CURRICULUM GUIDES; SECONDARY GRADES

ABSTRACT - TO IMPROVE INSTRUCTION, A TENTATIVE CURRICULUM GUIDE WAS PREPARED AND PRESENTED TO TEACHERS ON THE JUNIOR AND SENIOR HIGH LEVEL. THE FOLLOWING COURSES ARE COVERED: (1) INTRODUCTORY GENERAL SHOP (WOOD AREA) FOR GRADES 7 OR 8, (2) INTRODUCTORY WOODWORKING IN GRADES 7 OR 8, (3) GENERAL SHOP I (WOOD AREA) FOR GRADES 9, 10, 11, OR 12, (4) GENERAL SHOP II (WOOD AREA) FOR GRADES 9, 10, 11, OR 12, (5) GENERAL WOODWORKING FOR GRADES 9, 10, 11, OR 12, (6) MACHINE WOODWORKING I FOR GRADES 10, 11, 12, AND (7) MACHINE WOODWORKING II FOR GRADES 11 OR 12. EACH COURSE OUTLINE CONTAINS A GENERAL INTRODUCTION, SUGGESTION GRADE LEVEL, CLASS TIME ALLOTMENT, RECOMMENDED CLASS SIZE, COURSE CREDIT, PREREQUISITES, SUGGESTED ACTIVITIES, SUGGESTED HOMEWORK, DISCIPLINE PROCEDURES, COURSE OBJECTIVES, TOPICAL OUTLINE OF CONTENT, SUGGESTED TEACHING AIDS, SUGGESTED TEACHING METHODS, AND SUGGESTIONS FOR SHOP ORGANIZATION. HINTS ON SAFETY INSTRUCTION AND SAFETY RULES ARE GIVEN FOR VARIOUS AREAS OF THE WOOD SHOP. A SUGGESTED TOOL AND EQUIPMENT LIST IS GIVEN ALONG WITH A SUGGESTED FLOOR PLAN. (EM)

VT 000 980
DRAFTING, GRADES 7-12.

TEXAS INDUSTRIAL ARTS ASSOCIATION, DENTON
TEXAS EDUCATION AGENCY, AUSTIN
PUB DATE - JUN64 62P.

DESCRIPTORS - *INDUSTRIAL ARTS; *DRAFTING; *CURRICULUM GUIDES; SECONDARY GRADES

ABSTRACT - THE DEFINITION OF THE SCOPE AND DEPTH OF DRAFTING COURSES TAUGHT IN TEXAS PUBLIC SCHOOLS AND THE RECOMMENDATION OF NEEDED MATERIALS AND EQUIPMENT ARE THE PURPOSES OF THIS GUIDE. THESE COURSES ARE COVERED: (1) INTRODUCTORY DRAFTING FOR GRADES 7 OR 8, (2) GENERAL SHOP DRAFTING FOR GRADES 7, 8, 9, 10, 11, OR 12, (3) GENERAL DRAFTING FOR GRADES 9, 10, 11, OR 12, (4) ARCHITECTURAL DRAFTING I FOR GRADES 10, 11, OR 12, (5) ARCHITECTURAL DRAFTING II FOR GRADES 11 OR 12, (6) MACHINE DRAFTING I FOR GRADES 10, 11, OR 12, (7) MACHINE DRAFTING II FOR GRADES 11 OR 12, (8) PRE-ENGINEERING DRAFTING FOR GRADES 10, 11, OR 12, (9) PRE-ENGINEERING DESCRIPTIVE GEOMETRY FOR GRADES 11 OR 12, (10) TECHNICAL DRAFTING I FOR GRADES 10, 11, OR 12, AND (11) TECHNICAL DRAFTING II FOR GRADES 11 OR 12. EACH OF THE COURSE OUTLINES GIVES THE GRADE PLACEMENT OF THE COURSE, PREREQUISITES, CREDIT FOR COURSE, COURSE OBJECTIVES, COURSE TOPICS, AND DESIRED BEHAVIORAL CHANGES. SOME OF THE ADVANCED

COURSE OUTLINES ALSO INCLUDE HINTS ON STUDENT SELECTION, CONTENT SELECTION, SUGGESTED TEACHING METHODS, AND A DISCUSSION OF THE SCOPE AND DEPTH OF THE COURSE. ALSO GIVEN ARE SUGGESTIONS FOR PLANNING LABORATORIES AND EQUIPMENT AND FOR TWO FLOOR PLANS. (EM)

VT 001 200
INSTRUCTIONAL GUIDE FOR METALS. INDUSTRIAL ARTS EDUCATION BULLETIN NO. 8.

HAWAII STATE DEPT. OF EDUCATION, HONOLULU.
INDUSTRIAL ARTS EDUCATION SERVICE
PUB DATE - 65 202P.

DESCRIPTORS - *INDUSTRIAL ARTS; *STATE CURRICULUM GUIDES; *METALS; METAL INDUSTRY; METALLURGY; METAL WORKING OCCUPATIONS; BIBLIOGRAPHIES; SAFETY EDUCATION; SCHOOL SHOPS; SECONDARY GRADES

ABSTRACT - MAJOR PURPOSES OF THIS GUIDE ARE TO ASSIST TEACHERS IN THE IMPROVEMENT OF COURSE PLANNING AND TO PROVIDE FOR UNIFORMITY OF METAL PROGRAMS THROUGHOUT THE STATE. IT COVERS SIX SEMESTERS AND SUGGESTS DOUBLE PERIOD SCHEDULING FOR THE LAST FOUR SEMESTERS. CONTENTS INCLUDE CONTENT OBJECTIVES OF INDUSTRIAL ARTS PROGRAMS, BEHAVIORAL CHANGE OBJECTIVES, SUGGESTED SEQUENCE OF COURSES, COURSE OUTLINES FOR SIX METALS COURSES, TEACHING TECHNIQUES, SAMPLE ASSIGNMENT SHEETS, SAMPLE JOB SHEETS, SAMPLE INFORMATION SHEETS, SAMPLE STUDY GUIDES AND TESTS, SAFETY INSTRUCTIONS, A SECTION ON SHOP ORGANIZATION AND MANAGEMENT, A BIBLIOGRAPHY OF INSTRUCTIONAL AIDS, GUIDANCE PROCEDURES, REQUISITION AND REPORT FORMS, EQUIPMENT AND SUPPLY LISTS, AND BIBLIOGRAPHY OF TEXTBOOKS PUBLISHED FROM 1950 TO 1965. (EM)

VT 001 258
SALMON, DANIEL A.
INDUSTRIAL ARTS WOODWORKING, SECONDARY SCHOOLS. FIRST YEAR.

NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y.
BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 ($2.00).
CURRICULUM BULLETIN 10; 1963-64 SERIES.
PUB DATE - 65 121P.

DESCRIPTORS - *WOODWORKING; GRADE 10; *TEACHING GUIDES; *INDUSTRIAL ARTS

ABSTRACT - THIS CURRICULUM, BASED ON MATERIAL OUTLINED IN THE "COURSE OF STUDY IN INDUSTRIAL ARTS--GRADES 10, 11, 12," (CURRICULUM BULLETIN NO. 6, 1954-55 SERIES) IS DESIGNED FOR A BEGINNING COURSE AT THE SENIOR HIGH LEVEL. THE CONTENT CONCERNS HAND TOOL AND MACHINE OPERATIONS AND PRESENTS SEVERAL SAMPLE PROJECTS SUITABLE FOR INDIVIDUAL OR MASS PRODUCTION. SAMPLE PLAN SHEETS, LESSON PLANS, INFORMATION SHEETS, TESTS AND PROJECT PLANS ARE GIVEN. CHAPTER TITLES ARE: (1) INTRODUCTION, (2) COURSE CONTENT, (3) THE BASIC CONTENT, (4) THE LATHE PROJECT, (5) THE MASS PRODUCTION PROJECT, (6) THE GROUP PROJECT, (7) THE INDIVIDUAL PROJECT, AND (8) TESTING IN THE SHOP. BIBLIOGRAPHIC ITEMS, WITH DATES RANGING FROM 1935 TO 1963, INCLUDE: TESTS, FILMS, FILMSTRIPS, CHARTS, AND BOOKLETS. (EM)

VT 001 359
INDUSTRIAL ARTS. CAREER GUIDANCE SERIES. CURRICULUM BULLETIN, 1966-67 SERIES NO. 8J.

NEW YORK CITY BOARD OF EDUCATION, N.Y.
BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 ($2.00).
PUB DATE - 66 189P.

DESCRIPTORS - *INDUSTRIAL ARTS; *RESOURCE MATERIALS; *JUNIOR HIGH SCHOOLS; *CAREER PLANNING; POWER MECHANICS; CONSTRUCTION INDUSTRY; BUILDING TRADES; OFFICE MACHINES

ABSTRACT - THIS RESOURCE GUIDE IS FOR TEACHERS OF INDUSTRIAL ARTS IN THE CAREER GUIDANCE PROGRAM TO USE IN PROVIDING PUPILS WITH INDUSTRIAL ACTIVITIES AND RELATED ACADEMIC EXPERIENCES AT THE JUNIOR HIGH SCHOOL LEVEL. IT WAS DEVELOPED BY A GROUP OF SUPERVISORS AND TEACHERS AS AN EXPERIMENTAL STUDY TO CREATE A PROGRAM FOR POTENTIAL DROPOUT STUDENTS AND REVISED DURING THREE YEARS OF TRIAL AND EVALUATION. THE GUIDE PRESENTS SUGGESTED METHODS, MATERIALS, AND INSTRUCTIONAL AIDS IN FOUR AREAS: (1) GENERAL CONSTRUCTION AND REPAIR, (2) BUILDING CONSTRUCTION AND MAINTENANCE, (3) POWER MECHANICS, AND (4) OFFICE DUPLICATING MACHINES. EACH AREA CONTAINS A LIST OF PROCESSES AND SKILLS TO BE TAUGHT, RELATED ACADEMIC LEARNINGS TO BE DEVELOPED, MATERIALS, TOOLS, AND EQUIPMENT TO BE USED, AND SUGGESTED RESOURCE LESSONS. A RELATED SUPPLEMENT IS AVAILABLE AS VT 000 239 (ALSO IN THIS ISSUE). (GR)

VT 001 479
WILLIAMS, KENNETH E.
INDUSTRIAL EDUCATION IN HAMPTON SCHOOL SYSTEM, 1966-1967 .

HAMPTON PUBLIC SCHOOLS, VA.
PUB DATE - 66 154P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; CURRICULUM; SENIOR HIGH SCHOOLS; *INDUSTRIAL EDUCATION; *PROGRAM GUIDES; JUNIOR HIGH SCHOOLS

ABSTRACT - THE PURPOSE OF THIS GUIDE IS TO HELP TEACHERS COORDINATE THE INDUSTRIAL ARTS CURRICULUM. IT WAS COMPILED AND WRITTEN BY TEACHERS UNDER THE DIRECTION OF THE VOCATIONAL AND INDUSTRIAL ARTS SUPERVISOR. JUNIOR HIGH SCHOOL COURSE OUTLINES INCLUDED ARE INDUSTRIAL ARTS I, II, III, IV, AND SUPPLEMENTARY AREAS PLASTICS, POWER MECHANICS, LEATHER, CERAMICS, AND BASIC ELECTRICITY AND ELECTRONICS. SENIOR HIGH SCHOOL COURSE OUTLINES INCLUDED ARE DRAFTING, ARCHITECTURAL DRAFTING, WOODWORK, METALS, GRAPHIC ARTS, ELECTRONICS, MASONRY, AND METAL CLUSTER. EACH COURSE OUTLINE GIVES: (1) TIME REQUIRED, (2) TOPIC, (3) TOPIC OBJECTIVE, AND (4) RESOURCE MATERIALS AND AIDS. THE INDUSTRIAL ARTS COURSES OFFERED BY THE

DIFFERENT SCHOOLS IN THE SYSTEM AND A LIST OF TEACHERS ARE GIVEN. (EM)

VT 001 686
INDUSTRIAL ARTS ELECTRICITY-ELECTRONICS, GRADES 7-12. COURSE GUIDE.

TEXAS INDUSTRIAL ARTS ASSCCIATION
TEXAS EDUCATION AGENCY, AUSTIN
TEXAS EDUCATION AGENCY, 201 EAST ELEVENTH, AUSTIN, TEXAS 78712 ($.20).
PUB DATE - OCT66 56P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *ELECTRICITY; *ELECTRONICS; SECONDARY GRADES; EDUCATIONAL FACILITIES

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY STATE SUPERVISORS AND TEACHER EDUCATORS TO PROVIDE TEACHERS WITH INFORMATION USEFUL IN ORGANIZING AND TEACHING ELECTRICITY AND ELECTRONICS IN INDUSTRIAL ARTS. "INTRODUCTORY ELECTRICITY" OUTLINES A CURRICULUM FOR GRADES 7 OR 8 WHICH HAS NO PREREQUISITE AND WHICH CAN BE ONE OR TWO SEMESTERS IN LENGTH. "GENERAL ELECTRICITY" OUTLINES A CURRICULUM WHICH MAY BE USED IN GRADE 9, 10, 11, OR 12 IN WHICH THE FIRST SEMESTER SERVES AS A PREREQUISITE FOR THE SECOND SEMESTER. "BASIC ELECTRONICS" CUTLINES A CURRICULUM FOR GRADES 10, 11 OR 12 WHICH REQUIRES "GENERAL ELECTRICITY" AS A PREREQUISITE AND THE FIRST SEMESTER AS A PREREQUISITE FOR THE SECOND. COURSE OBJECTIVES, INSTRUCTIONAL ORGANIZATION AND MATERIALS, AND COURSE OUTLINES ARE GIVEN FOR EACH OF THESE LEVELS. SUPPLEMENTARY MATERIALS INCLUDE: (1) OUTLINE FOR PLAN SHEET, (2) FACILITIES RECOMMENDATIONS, (3) EQUIPMENT LIST, (4) SHOP FLOOR PLANS, AND (5) SELECTED BIBLICGRAPHY OF TEXTBOOKS. (EM)

VT 001 858
TAYLOR, ARLIN
CAREER EDUCATION RESOURCE GUIDE.

NAPA COUNTY SUPERINTENDENT OF SCHOOLS, CALIF.
PUB DATE - NOV66 68P.

DESCRIPTORS - *BIBLIOGRAPHIES; *FILMS; *FILMSTRIPS; *EDUCATIONAL RESOURCES; *INDUSTRIAL ARTS; OCCUPATIONAL INFORMATION

ABSTRACT - THIS GUIDE CONTAINS A LIST OF BUSINESS AND OTHER ESTABLISHMENTS WHICH PROVIDE GUIDANCE OR EDUCATIONAL RESOURCES, AND AN ANNOTATED BIBLIOGRAPHY OF EDUCATIONAL FILMS. FOR EACH ESTABLISHMENT INFORMATION IS GIVEN FOR (1) AVAILABILITY OF TOURS, SPEAKERS, AND REFFRENCE MATERIALS, (2) CONTACT PERSONS, (3) PRODUCTS, AND (4) EMPLOYMENT REQUIREMENTS. THE BIBLIOGRAPHY LISTS 219 FILMS AND FILMSTRIPS CATEGORIZED UNDER THE SUBJECTS: (1) AUTO, (2) CRAFTS, (3) ELECTRICITY, (4) MECHANICAL DRAWING, (5) METALS, AND (6) WOOD. THE FILM ANNOTATIONS WERE WRITTEN BY INDUSTRIAL ARTS INSTRUCTORS. FILM SOURCES ARE GIVEN. (EM)

VT 001 958
INDUSTRIAL ARTS CURRICULUM PLANNING GUIDE, GRADES 7-12.

IDAHO STATE DEPT. OF EDUCATION, BOISE. DIV. OF INSTRUCTION
PUB DATE - 6DEC63 133P.

DESCRIPTORS - *INDUSTRIAL ARTS; CURRICULUM GUIDES; *SECONDARY EDUCATION; *PROGRAM DESCRIPTIONS; EDUCATIONAL PHILOSOPHY; EDUCATIONAL OBJECTIVES; *STATE CURRICULUM GUIDES; COURSE DESCRIPTIONS; COURSE OBJECTIVES; COURSE ORGANIZATION; INSTRUCTIONAL MATERIALS

ABSTRACT - DEVELOPED BY AN INDUSTRIAL ARTS COMMITTEE AT THE STATE LEVEL, THIS STATE CURRICULUM GUIDE IS FOR TEACHER USE IN PLANNING AND IMPLEMENTING COURSES FOR STUDENTS IN ALL AREAS OF INDUSTRIAL ARTS FROM GRADES 7-12. THE PROGRAM IS PYRAMIDED, BEGINNING WITH A GENERAL COURSE AT THE JUNIOR HIGH LEVEL OFFERED 55 MINUTES PER DAY, 5 DAYS A WEEK, AND PROGRESSING TO A HIGH DEGREE OF SPECIALIZATION FOR GRADES 11-12, STRUCTURED SO THAT A STUDENT MAY TAKE ONE OR MORE COURSES FOR 2 SUCCESSIVE YEARS. COURSE DESCRIPTION, COURSE OBJECTIVES, INSTRUCTIONAL ACTIVITIES, AND INSTRUCTIONAL UNITS ARE GIVEN FOR THE 22 COURSES, WITH MAJOR EMPHASIS ON DRAWING, WOODWORK, ELECTRICITY, AND METALS, BUT PROVISION ALSO FOR THE NEWER CRAFT AREAS SUCH AS PLASTICS, LEATHER, ART METAL, MOSAICS, AND CERAMICS. A FINAL SECTION ON CURRICULUM IMPLEMENTATION OFFERS SUGGESTIONS TO THE INSTRUCTOR CONCERNING STUDENT PROJECTS, PROJECT PLANNING, RESOURCE MATERIAL, AND SHOP SAFETY. (GR)

VT 002 002 ED 021 963
HASTINGS, JAMES R., ED.
CERAMICS, PROJECT IDEAS FOR INDUSTRIAL ARTS .

NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF SECONDARY CURRICULUM DEVELOPMENT
PUB DATE - 66 185P.

DESCRIPTORS - *RESOURCE UNITS; *INDUSTRIAL ARTS; *CERAMICS; JUNIOR HIGH SCHOOLS; SENIOR HIGH SCHOOLS; *STUDENT PROJECTS

ABSTRACT - THIS BOOK OF CERAMIC PROJECT IDEAS IS FOR TEACHER OR STUDENT USE IN SECONDARY INDUSTRIAL ARTS COURSES. IT WAS DEVELOPED IN A WORKSHOP BY TEACHERS. THE CONTENT OBJECTIVES ARE TO PROVIDE USEFUL PROJECTS AND UNITS OF INSTRUCTION AND TO GIVE DIRECTION TO CERAMICS INSTRUCTION WHICH IS IN KEEPING WITH A CHANGING TECHNOLOGY. FORTY-ONE PROJECT PLANS ARE PRESENTED UNDER THESE UNITS: (1) HAND FORMING, (2) SLAB CONSTRUCTING, (3) FREE FORMING, (4) PRESS MOLDING, (5) SOLID CASTING, (6) SLIP CASTING, (7) EXTRUDING, (8) THROWING AND TURNING, AND (9) JIGGERING. EACH UNIT GIVES PROJECT PLANS, STUDENT ACTIVITIES, PROJECT PROCEDURES, RELATED TECHNICAL INFORMATION, TEACHER DEMONSTRATIONS, RELATED CULTURAL INFORMATION, AND REFERENCES. SIMILARLY ORGANIZED UNITS COVER 13 TOOLS OR PIECES OF EQUIPMENT SUCH AS A JIGGER ARM, STILTS, AN EXTRUSION PRESS, AND A TURNING BOX. INFORMATION CONCERNING THE MAKING OF GLAZES IS ALSO INCLUDED. SUPPLEMENTARY MATERIALS INCLUDE A GLOSSARY OF CERAMIC TERMS, A BIBLIOGRAPHY OF BOOKS AND PERIODICALS, AND INDEXES TO RELATED TECHNICAL

AND CULTURAL TOPICS. (EM)

VT 002 004
AN EXPERIMENTAL RESOURCE UNIT IN PLASTICS FOR INDUSTRIAL ARTS.

NEW YORK STATE EDUCATION DEPT., ALBANY.
BUREAU OF SECONDARY CURRICULUM DEVELOPMENT.
THE PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT, ALBANY, NEW YORK 12224 (SINGLE COPIES AVAILABLE).
PUB DATE - 66 218P.

DESCRIPTORS - *RESOURCE UNITS; *INDUSTRIAL ARTS; SECONDARY GRADES; *PLASTICS; BIBLIOGRAPHIES; *CURRICULUM GUIDES; *TEACHING GUIDES; LESSON PLANS; SUPPLIES; DIRECTORIES; CURRICULUM DEVELOPMENT

ABSTRACT - DEVELOPED BY THE BUREAU OF SECONDARY CURRICULUM DEVELOPMENT FOR THE NEW YORK STATE EDUCATION DEPARTMENT, THIS RESOURCE UNIT IS FOR USE IN MODIFYING INDUSTRIAL ARTS INSTRUCTION IN THE SECONDARY GRADES TO PROVIDE FOR PLASTIC INSTRUCTION. THESE MATERIALS WERE DEVELOPED WITH TWO PURPOSES IN MIND: (1) TO PROVIDE A GUIDE FOR CONTENT AND DEVELOPMENT OF LOCALLY DESIGNED COURSES OF STUDY, AND (2) TO PROVIDE THE MOST ENRICHED AND COMPLETE OUTSIDE RESOURCE MATERIALS WHICH COULD BE IDENTIFIED. THE CONTENTS HAVE BEEN ARRANGED IN 12 MAJOR UNITS: (1) ORIENTATION, (2) MOLDING AND FORMING, (3) MOLDMAKING, (4) BONDING, (5) LAMINATES, (6) ENCAPSULATION, (7) FORMS, (8) COATING, (9) VINYL DISPERSION-THERMOFUSION, (10) DECORATING, (11) MATERIALS, AND (12) GUIDANCE. SUPPLY LISTS AND SOURCES OF SUPPLIES ARE CONTAINED IN THE APPENDIX. THE BIBLIOGRAPHY IS DIVIDED INTO THREE SECTIONS: (1) BASIC LIBRARY REFERENCES, (2) SUPPLEMENTAL REFERENCE LIST, AND (3) FREE OR INEXPENSIVE REFERENCES. (GEB)

VT 002 009 ED 022 843
INDUSTRIAL ARTS HUMANITIES MEDIA GUIDE: CUE .

NEW YORK STATE EDUCATION DEPT., ALBANY
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - 65 117P.

DESCRIPTORS - *CURRICULUM GUIDES; *TEACHING GUIDES; *INDUSTRIAL ARTS; GRADE 9; *HUMANITIES; INSTRUCTIONAL MATERIALS; CULTURAL ENRICHMENT
IDENTIFIERS - *PROJECT CUE

ABSTRACT - THIS CURRICULUM GUIDE IS FOR TEACHER USE IN COURSE AND LESSON PLANNING FOR NINTH GRADE INDUSTRIAL ARTS. IT WAS DEVELOPED BY PROJECT CUE (CULTURE, UNDERSTANDING, ENRICHMENT), A PROJECT FUNDED BY THE U.S. OFFICE OF EDUCATION, AS PART OF A GROUP OF MATERIALS DESIGNED TO INTEGRATE AND ENCOURAGE HUMANITIES INSTRUCTION IN VARIOUS SUBJECT AREAS. THE ORIGINAL MATERIALS WERE TRIED IN 13 PROJECT SCHOOLS AND REVISED BEFORE PUBLICATION. THIRTY LESSONS WERE ORGANIZED UNDER THE FOLLOWING HEADINGS: (1) ARCHITECTURE AND CONSTRUCTION, (2) CERAMICS, (3) GRAPHIC ARTS, (4) INDUSTRIAL DESIGN, (5) LEATHER, (6) METALWORKING, (7) PHOTOGRAPHY, (8) TEXTILES, AND (9) WOODWORKING. EACH OF THE LESSONS PROVIDES (1) THE TITLES OF INSTRUCTIONAL MATERIALS SUCH AS FILMS, PAMPHLETS, OR PHOTOGRAPHS, (2) LESSON OBJECTIVES, (3) A LESSON SYNOPSIS BASED ON THE INSTRUCTIONAL MATERIAL, (4) SUGGESTED TEACHER PREPARATION, (5) KEY TERMINOLOGY, (6) SUGGESTED STUDENT ACTIVITIES DURING AND FOLLOWING THE LESSON, AND (7) SUGGESTED OPTIONAL INTELLECTUAL AND CREATIVE STUDENT ACTIVITIES. THE DESIGNATED INSTRUCTIONAL MATERIALS SERVE AS THE FOCUS FOR EACH LESSON AND EACH WAS SELECTED FOR A PARTICULAR CULTURAL PURPOSE WHICH IS EXPRESSED IN THE OBJECTIVES. ALSO INCLUDED IS A LIST OF SOURCES FOR THE INSTRUCTIONAL MATERIALS. (EM)

VT 002 032
SPINTI, ROBERT J., COMP.
APPLIED ELECTRICITY. (INDUSTRIAL ARTS SERIES).

MISSOURI UNIV., COLUMBIA. DEPT. OF INDUSTRIAL EDUCATION
MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY. INDUSTRIAL EDUCATION SECTION
PUB DATE - SEP63 162P.

DESCRIPTORS - CURRICULUM GUIDES; *TEACHING GUIDES; *TRADE AND INDUSTRIAL EDUCATION; *ELECTEICITY; HIGH SCHOOLS; BIBLIOGRAPHIES; REFERENCE MATERIALS; INSTRUCTIONAL FILMS; COOPERATIVE EDUCATION; ASSIGNMENTS; TESTS; ANSWER KEYS; EDUCATIONAL EQUIPMENT

ABSTRACT - THE PURPOSE OF THE COURSE OF STUDY IS TO ASSIST THE TEACHER IN ESTABLISHING OR REVISING A COURSE IN BASIC APPLIED ELECTRICITY ON THE SECONDARY LEVEL. PREPARATION WAS DONE BY A GRADUATE RESEARCH ASSISTANT IN COOPERATION WITH AN ADVISORY COMMITTEE, SUBJECT MATTER SPECIALISTS, AND TEACHER EDUCATORS. MAJOR DIVISIONS ARE--(1) FUNDAMENTALS OF ELECTRICITY, (2) MAGNETISM AND ELECTROMAGNETISM, (3) SOURCES AND DISTRIBUTION OF ELECTRICAL ENERGY, (4) ELECTRICAL CONDUCTORS AND HEAT, (5) LIGHT AND ELECTRICITY, (6) RESIDENTIAL WIRING, (7) MOTORS, (8) CONTROLS, (9) APPLIANCES, (10) AUTOMOTIVE ELECTRICITY, AND (11) ELECTRONICS. LENGTH OF THE COURSE SHOULD PROVIDE FOR 360 HOURS OF RELATED INSTRUCTION AND LABORATORY EXPERIENCE. INCLUDED ARE 29 JOB ASSIGNMENT SHEETS AND 21 INFORMATIONAL ASSIGNMENT SHEETS KEYED TO THE 26 TEXTBOOKS LISTED. THE BIBLIOGRAPHY LISTS 29 REFERENCE MATERIALS, 83 FILMS, 10 PERIODICALS, AND 38 INSTRUCTIONAL MATERIALS. A SUGGESTED FLOORPLAN, EQUIPMENT AND TOOL LIST WITH PRICES, AND SUPPLY SOURCE LIST ARE ALSO GIVEN. THE APPENDIX CONTAINS TWO EXAMINATIONS AND THEIR KEYS. (EM)

VT 002 112
A GUIDE FOR TEACHING POWER MECHANICS IN INDUSTRIAL ARTS IN INDIANA.

INDIANA STATE DEPT. OF PUBLIC INSTRUCTION, INDIANAPOLIS
PUB DATE - ND 70P.

DESCRIPTORS - *INDUSTRIAL ARTS; *POWER MECHANICS; *STATE CURRICULUM GUIDES; SECONDARY EDUCATION; *TEACHING GUIDES; COURSE DESCRIPTIONS; COURSE ORGANIZATION; PROGRAM

CONTENT; UNITS OF STUDY (SUBJECT FIELDS); BIBLIOGRAPHIES; LABORATORY EQUIPMENT; INSTRUCTIONAL MATERIALS

ABSTRACT - DEVELOPED BY A GROUP OF TEACHER EDUCATORS, STATE AND LOCAL ADMINISTRATORS, AND HIGH SCHOOL TEACHERS, THIS GUIDE IS FOR TEACHER USE IN PLANNING A COURSE OF STUDY IN POWER MECHANICS FOR GRADES 7 THROUGH 12. FOLLOWING A LIST OF GENERAL OBJECTIVES IS THE TEACHING OUTLINE OF UNITS IN: (1) INTRODUCTION TO POWER MECHANICS, (2) POWER GENERATION THROUGH PRIME MOVERS, (3) POWER MEASUREMENT, (4) POWER TRANSMISSION, (5) FUELS AND LUBRICANTS, (6) INTERNAL COMBUSTION ENGINES, (7) STEAM, AND (8) ATOMIC AND SOLAR ENERGY. EACH UNIT INCLUDES TEACHING ACTIVITIES, STUDENT ACTIVIVIES, JUNIOR HIGH OR SENIOR HIGH SCHOOL LEVEL, TECHNICAL CONTENT OUTLINE, TEXT REFERENCES, AND AUDIO-VISUAL MATERIALS. A TEXT AND REFERENCE LIST, AN AUDIO-VISUAL MATERIALS AND SOURCE ADDRESS LIST, SUGGESTED LABORATORY FACILITIES AND INSTRUCTIONAL EQUIPMENT, SOURCES FOR INSTRUCTIONAL MATERIALS, AND SOURCES FOR FREE AND INEXPENSIVE TEACHING MATERIALS ARE APPENDED. (GR)

VT 002 345
WOODWARD, ROBERT L.
INDUSTRIAL ARTS SAFETY INSTRUCTION.

CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO
PUB DATE - 66 70P.

DESCRIPTORS - *INDUSTRIAL ARTS EDUCATION; *SAFETY EDUCATION; *LABORATORY SAFETY; SAFETY EQUIPMENT; ACCIDENT PREVENTION; *EQUIPMENT UTILIZATION; INSTRUCTIONAL MATERIALS; *TEACHING GUIDES; RESOURCE GUIDES; FIRE PROTECTION

ABSTRACT - BASED UPON A STUDY CONDUCTED BY THE AUTHOR, A CONSULTANT IN INDUSTRIAL ARTS EDUCATION, THIS GUIDE IS FOR TEACHER AND STUDENT USE IN PROVIDING SAFETY INSTRUCTION AND EVALUATION OF SAFETY INSTRUCTION IN THE USE OF TOOLS AND EQUIPMENT IN INDUSTRIAL ARTS COURSES WAS PREPARED TO: (1) HELP THE INDUSTRIAL ARTS TEACHER IN SMALL SCHOOLS MEET SAFETY NEEDS, (2) SERVE AS A BASIS FOR REORGANIZING EXISTING SAFETY PROGRAMS, (3) MEET CERTAIN LEGAL REQUIREMENTS OF ACCIDENT LIABILITY AND REQUIRED SAFETY INSTRUCTION, AND (4) PROVIDE A BASIS FOR CARRYING OUT THE RULES AND REGULATIONS OF THE STATE SAFETY DIVISION. SECTIONS INCLUDE SAFETY INSTRUCTIONS FOR METALWORKING EQUIPMENT, WOODWORKING EQUIPMENT, AUTOMOTIVE AND POWER MECHANICS EQUIPMENT, ELECTRICAL AND ELECTRONIC EQUIPMENT, AND GRAPHIC ARTS EQUIPMENT. THE SECTIONS ALSO INCLUDE SAFETY TEST QUESTIONS AND ANSWERS. (GR)

VT 002 504
ADMINISTRATIVE GUIDELINES FOR INDUSTRIAL EDUCATION, GRADES 7-12.

NEBRASKA INDUSTRIAL EDUCATION ADVISORY COMMITTEE
NEBRASKA STATE DEPT. OF EDUCATION, LINCOLN
DIVISION OF VOCATIONAL EDUCATION, STATE DEPARTMENT OF EDUCATION, 10TH FLOOR, STATE CAPITOL, P.O. BOX 94727, LINCOLN, NEBRASKA 68509
PUB DATE - AUG66 52P.

DESCRIPTORS - *ADMINISTRATOR GUIDES; *INDUSTRIAL EDUCATION; *GUIDELINES; SECONDARY GRADES; INDUSTRIAL ARTS; TRADE AND INDUSTRIAL EDUCATION; ORGANIZATION; PROGRAM PLANNING; CURRICULUM

ABSTRACT - DEVELOPED BY STATE SUPERVISORS, TEACHER EDUCATORS, AND SUBJECT MATTER SPECIALISTS, THIS ADMINISTRATIVE GUIDE WAS DESIGNED TO AID SCHOOL ADMINISTRATORS AND TEACHERS IN THE DEVELOPMENT OF QUALITY PROGRAMS IN INDUSTRIAL ARTS AND VOCATIONAL EDUCATION FOR GRADES 7 THROUGH 12. FOLLOWING A PICTORIAL REPRESENTATION OF INDUSTRIAL EDUCATION SHOP ORGANIZATION ARE GUIDELINES ON PROGRAM BELIEFS AND OBJECTIVES, STUDENT FLOW WITHIN THE PROGRAM, SAFETY AND SCHOOL SHOP PLANNING, TEACHER PREPARATION, AND REIMBURSABLE VOCATIONAL PROGRAMS. THE CURRICULUM FOR THE SECONDARY GRADES INDUSTRIAL EDUCATION PROGRAM IS PRESENTED THROUGH THE USE OF AN INTRODUCTORY STATEMENT, A LIST OF OBJECTIVES, AND A CONTENT LIST FOR EACH COURSE. COURSES OUTLINED FOR THE JUNIOR HIGH SCHOOL ARE INDUSTRIAL, CRAFTS, DRAFTING, ELECTRICITY-ELECTRONICS, GRAPHIC ARTS, METALWORKING, INTRODUCTORY POWER MECHANICS, AND WOODWORKING. SENIOR HIGH SCHOOL COURSES PRESENTED ARE DRAFTING, ELECTRICITY-ELECTRONICS, GRAPHIC ARTS, METALWORKING, POWER MECHANICS, AND WOODWORKING. APPENDED ARE LISTS OF PUBLISHERS, PERIODICALS, AND PROGRAM TERMINOLOGY. (EM)

VT 002 506
KLABENES, ROBERT E., AND OTHERS
NEBRASKA INDUSTRIAL EDUCATION CURRICULUM GUIDE, GRADES 7-12L.

NEBRASKA STATE DEPT. OF EDUCATION, LINCOLN
NEBRASKA INDUSTRIAL EDUCATION ADVISORY COMMITTEE
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - 66 52P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *TRADE AND INDUSTRIAL EDUCATION; *INDUSTRIAL ARTS; COURSE OBJECTIVES; CURRICULUM GUIDES; JUNIOR HIGH SCHOOLS; SENIOR HIGH SCHOOLS; *PREVOCATIONAL EDUCATION
IDENTIFIERS - NEBRASKA

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE IN COURSE PLANNING FOR JUNIOR AND SENIOR HIGH SCHOOL INDUSTRIAL EDUCATION. IT WAS DEVELOPED BY A STATE ADVISORY COMMITTEE TO PROVIDE SUGGESTIONS FOR LOCAL COURSES OF STUDY. JUNIOR HIGH LEVEL COURSE OUTLINES ARE GIVEN FOR (1) ART METAL, (2) LEATHERCRAFT, (3) PLASTICS, (4) DRAFTING, (5) ELECTRICITY-ELECTRONICS, (6) GRAPHIC ARTS, (7) POWER MECHANICS, (8) METALWORKING, AND (9) WOODWORKING. SENIOR HIGH LEVEL COURSE OUTLINES ARE GIVEN FOR (1) DRAFTING, (2) ELECTRICITY-ELECTRONICS, (3) GRAPHIC ARTS, (4) METALWORKING, (5) POWER MECHANICS, AND (6) WOODWORKING. SUPPLEMENTARY MATERIALS INCLUDE A PHILOSOPHICAL STATEMENT, PROGRAM ORGANIZATION CHARTS, AND A PERIODICAL

BIBLIOGRAPHY. (EM)

VT 002 559 ED 032 381
SCIENTIFIC AND ENGINEERING INFLUENCES ON INDUSTRIAL ARTS. A SUMMARY OF INSTITUTE ACTIVITIES (NDEA SUMMER INST., COLLEGE STATION, TEX.).

TEXAS A AND M UNIV., COLLEGE STATION. DEPT. OF INDUSTRIAL EDUCATION
PUB DATE - 67 229P.

DESCRIPTORS - *INDUSTRIAL ARTS; SECONDARY GRADES; *LABORATORY EXPERIMENTS; *INSERVICE TEACHER EDUCATION; *INDUSTRIAL ARTS TEACHERS; SCIENCE EXPERIMENTS; TEACHING GUIDES; BIBLIOGRAPHIES; RESOURCE MATERIALS; CURRICULUM DEVELOPMENT

ABSTRACT - THESE UNITS DEVELOPED FOR TEACHER USE CONSIST PRIMARILY OF A COLLECTION OF TYPICAL EXPERIMENTS OR RESEARCH ACTIVITIES DEVELOPED BY STAFF AND PARTICIPANTS OF A NATIONAL DEFENSE EDUCATION ACT INSTITUTE. THE INSTITUTE WAS DESIGNED TO BROADEN THE VIEWPOINT OF 25 INDUSTRIAL ARTS TEACHERS WITH REGARD TO SOME OF THE NEWER SCIENTIFIC AND/OR ENGINEERING DISCIPLINES. EACH EXPERIMENT OR ACTIVITY FOLLOWS A GENERAL OUTLINE OF: TITLE, OBJECTIVES, INTRODUCTION, REFERENCES, DEFINITIONS, EQUIPMENT AND MATERIALS NEEDED, PROCEDURES, AND QUESTIONS. TEXTUAL MATERIAL IS PRESENTED FOR THE TOPICS OF: (1) ADHESIVES, (2) DRAWING, (3) ELECTRICITY-ELECTRONICS, (4) FINISHES, (5) FOREST PRODUCTS, (6) FUELS AND LUBRICANTS, (7) METALS, AND (8) OTHER SUGGESTED EXPERIMENTAL ACTIVITIES. (GR)

VT 002 650
GUIDE LINES FOR THE JUNIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAM OF CHAMPAIGN COMMUNITY UNIT NO. 4, CHAMPAIGN, ILLINOIS.

CHAMPAIGN COMMUNITY UNIT 4 SCHOOL DISTRICT, ILL.
CHAMPAIGN COMMUNITY SCHOOL UNIT NO. 4, 703 SOUTH NEW, CHAMPAIGN, ILLINOIS ($5.00).
PUB DATE - 16JUN66 301P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; DRAFTING; ELECTRICITY; METALS; PLASTICS; POWER MECHANICS; PRINTING; WOODWORKING; *COURSE CONTENT

ABSTRACT - DEVELOPED BY A COMMITTEE OF INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN CO-ORDINATING JUNIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAMS. GENERAL OBJECTIVES AND A COURSE ANALYSIS AS WELL AS UNIT OUTLINES CONTAINING SPECIFIC OBJECTIVES, STUDY OUTLINE, AND REFERENCES ARE OFFERED FOR THESE SUBJECTS: DRAFTING, ELECTRICITY, GENERAL METALS, PLASTICS, POWER MECHANICS, PRINTING, AND WOODWORKING. THE MATERIAL IS DESIGNED TO BE USED OVER ONE SEMESTER OR A FULL YEAR BY INDIVIDUAL UNITS. (GR)

VT 002 778 ED 022 849
ERWIN, WILLIAM R., JR.
INDUSTRIAL ARTS; A GUIDE FOR COLORADO SCHOOLS .

COLORADO STATE DEPT. OF EDUCATION, DENVER. DIV. OF ELEMENTARY SECONDARY EDUCATION
OFFICE OF INSTRUCTIONAL SERVICES, DIVISION OF ELEMENTARY AND SECONDARY EDUCATION, COLORADO STATE DEPARTMENT OF EDUCATION, DENVER, COLORADO 80203 ($2.50).
PUB DATE - APR66 215P.

DESCRIPTORS - *PROGRAM GUIDES; *CURRICULUM GUIDES; *INDUSTRIAL ARTS; HIGH SCHOOLS; ELEMENTARY SCHOOLS

ABSTRACT - THIS PROGRAM GUIDE IS FOR TEACHER USE IN PLANNING AND OPERATING A LOCAL INDUSTRIAL ARTS PROGRAM. IT WAS DEVELOPED BY A COMMITTEE OF THE COLORADO INDUSTRIAL ARTS ASSOCIATION. THE GUIDE PRESENTS MAJOR CONCEPTS AND INFORMATION FOR A COMPREHENSIVE PROGRAM OF ELEMENTARY AND SECONDARY INDUSTRIAL ARTS, AND IT SUGGESTS A VARIETY OF EDUCATIONAL ACTIVITIES AND METHODS. MAJOR CHAPTERS ARE (1) THE PLACE OF INDUSTRIAL ARTS IN THE GENERAL EDUCATION PROGRAMS, (2) ORGANIZATION AND ADMINISTRATION IN THE INDUSTRIAL ARTS CLASSROOM, (3) SHOP PLANNING AND MAINTENANCE, (4) SAFETY AND LIABILITY, (5) FUNDAMENTALS OF DESIGN, (6) STUDENT EVALUATION, (7) HISTORIC BACKGROUND AND CURRENT TRENDS IN INDUSTRIAL ARTS EDUCATION, (8) THE GENERAL SHOP, (9) GENERAL CRAFTS, (12) MECHANICAL DRAFTING, (13) GENERAL METALS, (14) POWER MECHANICS, AND (15) WOODWORKING. MOST CHAPTERS INCLUDE INFORMATION, CONTENT OUTLINES, PHOTOGRAPHS OF FACILITIES OR PROJECTS, AND AN EXTENSIVE BIBLIOGRAPHY OF REFERENCES. (EM)

VT 002 860
AMERICAN INDUSTRY TECHNICAL REPORT, 1965-66 .

STOUT STATE UNIV., MENOMONIE, WIS.
OEC-5-85-060
PUB DATE - 66 28P.

DESCRIPTORS - INDUSTRY; ANNUAL REPORTS; *INDUSTRIAL ARTS; *EXPERIMENTAL PROGRAMS; *CURRICULUM DEVELOPMENT; *INSTRUCTIONAL MATERIALS; PILOT PROJECTS; TEACHER EDUCATION CURRICULUM; *PROGRAM ADMINISTRATION; PROGRAM EVALUATION; HIGH SCHOOLS
IDENTIFIERS - *AMERICAN INDUSTRY PROJECT

ABSTRACT - THIS ANNUAL REPORT IS COMPOSED OF REPORTS BY EACH OF THE SPECIALISTS IN THE AMERICAN INDUSTRY PROJECT TO DEVELOP A NEW CURRICULUM AREA FOR THE SECONDARY SCHOOL. ACCOMPLISHMENTS IN CURRICULUM DEVELOPMENT INCLUDED REFINING THE CONCEPTUAL STRUCTURE OF INDUSTRIAL KNOWLEDGE, DEVELOPING OBJECTIVES AND OUTLINES FOR SEVEN LEVEL I STUDENT TEXTS, IDENTIFYING LESSON TOPICS FOR DEVELOPING AN INSTRUCTOR'S GUIDE, AND MAINTAINING AND IMPROVING THE CURRICULUM RESOURCE CENTER. THE INSTRUCTIONAL MEDIA PERSONNEL SELECTED, DEVELOPED, AND ORGANIZED SUITABLE AUDIOVISUAL MATERIALS INCLUDING A FILM LIST, ILLUSTRATIONS, SLIDES, TRANSPARENCIES, AND OTHER MATERIALS. COORDINATING THE PARTICIPATING CENTERS INCLUDED SUCH ACTIVITIES AS PRELIMINARY PLANNING, MONTHLY

WORKSHOPS, OBSERVATION VISITS, AND SELECTION AND RETENTION OF PARTICIPATING TEACHERS AND SCHOOLS. WORK OF THE PILOT TEACHER EDUCATION PROGRAM CONSISTED OF REVIEWING LITERATURE, DEVELOPING A THEORETICAL TEACHER MODEL, DEVELOPING AN IDEAL CURRICULUM, PREPARING OUTLINES FOR AMERICAN INDUSTRY COURSES, ESTABLISHING CRITERIA FOR STUDENT SELECTION, AND SELECTING STUDENTS FOR THE TEACHER EDUCATION PROGRAM. ACTIVITIES OF THE RESEARCH SPECIALISTS ARE GROUPED INTO THE BROAD CATEGORIES OF DATA PROCESSING SYSTEM, PRESENTATIONS TO VARIOUS AUDIENCES, DEVELOPMENT OF MODELS FOR CONCEPT AREAS, AND PERSONAL DEVELOPMENT. GENERAL COMMENTS REGARDING THE YEAR'S WORK ARE PRESENTED BY THE CO-DIRECTORS. (HC)

VT 003 035
ZIEL, H.R.
INDUSTRIAL ARTS IN GENERAL EDUCATION .
RESEARCH REPORT I, 1966.

ALBERTA UNIV., EDMONTON. DEPT. OF INDUSTRIAL AND VOCATIONAL EDUCATION
PUB DATE - 66 21P.

DESCRIPTORS - *INDUSTRIAL ARTS; *JUNIOR HIGH SCHOOLS; *EXPERIMENTAL PROGRAMS; *PROGRAM DESCRIPTIONS; EXPERIMENTAL GROUPS; CONTROL GROUPS; *CURRICULUM EVALUATION; JUNIOR HIGH SCHOOL STUDENTS; MULTIMEDIA INSTRUCTION
IDENTIFIERS - EDMONTON; CANADA

ABSTRACT - THE OBJECTIVES OF THIS EXPERIMENTAL PROGRAM WERE TO PROVIDE (1) AN ENVIRONMENT WHERE STUDENTS CAN REINFORCE AND APPLY ACADEMIC DISCIPLINES, (2) EXPLORATORY EXPERIENCES IN VARIOUS PRODUCTIVE ASPECTS OF SOCIETY, (3) A SYNTHESIZING EDUCATIONAL ENVIRONMENT, AND (4) AN INTRODUCTION TO THE MULTIPLICITY OF CAREER OPPORTUNITIES DURING GRADES SEVEN THROUGH 12. FOUR PROGRAM PHASES WERE (1) A MULTIPLE ACTIVITY ENVIRONMENT INVOLVING CERAMICS, GRAPHIC ARTS, PLASTICS, WOODS, METALS, AND ELECTRICITY, (2) INTRODUCTION TO SELECTED TECHNOLOGIES, (3) THE ROLE AND FUNCTION OF MAN IN AN INDUSTRIALLY ORIENTED SOCIETY, AND (4) THE STUDY OF CLUSTERS OF TECHNOLOGIES WITHIN A RESEARCH AND DEVELOPMENT CONTEXT. RESEARCH CARRIED OUT DURING THE FIRST YEAR'S OPERATION WAS TO DETERMINE THE FEASIBILITY OF FURTHER DEVELOPMENTAL RESEARCH. A STRATIFIED SAMPLE CONSISTED OF FIVE EXPERIMENTAL AND FIVE MATCHED CONTROL GROUPS SELECTED ON THE BASIS OF ACHIEVEMENT FROM GRADES EIGHT AND NINE. THE EXPERIMENTAL TREATMENT WAS PHASE ONE OF THE PROGRAM, FOR ONE YEAR. FINDINGS INCLUDED: (1) GRADE NINE LOW-ACHIEVING BOYS IMPROVED IN READING, LANGUAGE, AND SOCIAL STUDIES, (2) GRADE EIGHT AVERAGE-ACHIEVING BOYS IMPROVED IN LANGUAGE, (3) GRADE EIGHT MIXED-ABILITY GIRLS IMPROVED IN MATHEMATICS AND SCIENCE, (4) GRADE NINE LOWEST-ACHIEVING BOYS IMPROVED IN ARITHMETIC CONCEPTS AND WORD AND PARAGRAPH COMPREHENSION, AND (5) GRADE NINE HIGH-ACHIEVING BOYS IMPROVED IN ALL ACADEMIC ACHIEVEMENT. (EM)

VT 003 271
INDUSTRIAL ARTS CURRICULUM PLANNING GUIDE, GRADES 7-12 .

IDAHO STATE DEPT. OF EDUCATION, BOISE. DIV. OF INSTRUCTION
PUB DATE - 64 136P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; SENIOR HIGH SCHOOLS; COURSE DESCRIPTIONS
IDENTIFIERS - IDAHO

ABSTRACT - THIS GUIDE WAS DEVELOPED BY A STATE LEVEL COMMITTEE FOR USE IN COORDINATING AND ENRICHING THE STATE'S INDUSTRIAL ARTS PROGRAMS. SECTIONS I AND II PROVIDE A PHILOSOPHY OF INDUSTRIAL ARTS, AND PRESENT THE CURRICULUM FROM GRADES 7 THROUGH 12. SECTION III PRESENTS DESCRIPTIONS, OBJECTIVES, AND INSTRUCTIONAL ACTIVITIES FOR (1) INDUSTRIAL ARTS I COVERING 1 YEAR OF SKETCHING AND PROJECT PLANNING, PLASTICS, AND INDUSTRIAL CRAFTS, (2) INDUSTRIAL ARTS II COVERING 1 YEAR OF DRAWING, BENCH METAL, ELECTRICITY, AND BENCH WOODWORK, (3) INDUSTRIAL ARTS III COVERING ONE SEMESTER IN EACH OF FOUR AREAS--GENERAL DRAFTING, MACHINE WOODWORK, GENERAL METALS, AND ELECTRICITY AND BASIC ELECTRONICS, AND (4) ADVANCED INDUSTRIAL ARTS COVERING 1-YEAR COURSES IN EACH OF FOUR AREAS--DRAFTING, WOODWORK, METALS, AND ELECTRICITY AND ELECTRONICS. AN OUTLINE OF THE COURSE UNITS, STUDENT SKILLS AND OPERATIONS, AND RELATED INFORMATION FOR EACH OF THE 22 COURSES ARE PROVIDED. SECTION IV DISCUSSES IMPLEMENTATION OF THE CURRICULUM. (EM)

VT 003 286
BAILEY, JAMES H., AND OTHERS
RELATED INFORMATION FOR THE STUDY OF FERROUS INDUSTRY .

CENTRAL MICHIGAN UNIV., MT. PLEASANT. DEPT. OF INDUSTRIAL EDUCATION
PUB DATE - 16AUG67 125P.

DESCRIPTORS - *RESOURCE UNITS; *INDUSTRIAL ARTS; *METALS; HIGH SCHOOLS; INSTRUCTIONAL FILMS; BIBLIOGRAPHIES

ABSTRACT - THIS RESOURCE UNIT IS FOR TEACHER USE IN A COURSE TREATING THE FERROUS METAL INDUSTRY. IT WAS DEVELOPED IN A NATIONAL DEFENSE EDUCATION ACT INSTITUTE FOR ADVANCED STUDY IN INDUSTRIAL ARTS BY 25 INDUSTRIAL ARTS METAL TEACHERS. TEXTUAL MATERIAL IS PRESENTED FOR THE TOPICS: (1) INTRODUCTION AND HISTORY, (2) OWNERSHIP AND CONTROL, (3) SOURCES OF RAW MATERIALS, (4) REFINING PROCESSES, (5) MANUFACTURING CONSUMER PRODUCTS, AND (6) SALES AND DISTRIBUTION. CURRICULAR MATERIALS INCLUDE UNITS ON MASS PRODUCTION TITLED: (1) INTRODUCTION AND HISTORY OF AMERICAN INDUSTRY, (2) FINANCIAL STRUCTURE OF INDUSTRY, (3) TYPICAL STRUCTURE AND PERSONNEL RESPONSIBILITIES IN AN INDUSTRIAL CORPORATION AS ADAPTED TO A CLASSROOM SITUATION, (4) RESEARCH AND DEVELOPMENT, AND (5) PRODUCTION, PLANNING, QUALITY CONTROL, AND PRODUCTION FLOW CHART. SUPPLEMENTARY MATERIALS INCLUDE (1) ORGANIZATIONAL CHARTS, (2) A UNIT TEST, AND (3) AN EXTENSIVE BIBLIOGRAPHY OF BOOKS, FILMS, PERIODICALS AND INSTITUTE RESOURCE MATERIALS. (EM)

VT 003 553
SALMON, DANIEL A., ED.
DRAFTING EXPERIENCES FOR INTERMEDIATE SCHOOL PUPILS, A RESOURCE BULLETIN FOR TEACHERS OF INDUSTRIAL ARTS. CURRICULUM BULLETIN, 1966-67 SERIES, NO. 9.

NEW YORK CITY BOARD OF EDUCATION, N.Y.
BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 ($3.00).
PUB DATE - 67 83P.

DESCRIPTORS - *RESOURCE GUIDES; INDUSTRIAL ARTS; *CORRELATION; *INTERMEDIATE GRADES; *DRAFTING; UNITS OF STUDY (SUBJECT FIELDS)

ABSTRACT - DEVELOPED BY A CURRICULUM COORDINATOR, THIS RESOURCE GUIDE WAS LATER TESTED IN COOPERATING JUNIOR HIGH SCHOOLS. THE MATERIALS MAY BE USED IN A ONE-TERM COURSE FOR TEACHING DRAFTING SKILLS, BUT SUGGESTIONS ARE ALSO GIVEN FOR CORRELATING THESE MATERIALS WITH SCIENCE, MATHEMATICS, LANGUAGE ARTS, SOCIAL STUDIES, ART, HEALTH EDUCATION, AND OTHER INDUSTRIAL AREAS. THE AIM, SUGGESTED ACTIVITIES, DISCUSSION TOPICS, TEACHER DEMONSTRATION, AND ASSIGNMENTS AND HOMEWORK ARE OUTLINED FOR EACH OF THE 24 LESSON PLANS. A SECTION DEVOTED TO TEACHER SUGGESTIONS COVERS: (1) RESOURCES AND AIDS, (2) NECESSARY EQUIPMENT AND MATERIALS, (3) VISUAL AIDS, (4) CLASSROOM MANAGEMENT, AND (5) TEACHING TECHNIQUES. (DM)

VT 003 713
STATE ADOPTED TEXTBOOKS FOR INDUSTRIAL ARTS IN INDIANA.

INDIANA STATE BOARD OF EDUCATION, INDIANAPOLIS
PUB DATE - 66 5P.

DESCRIPTORS - *TEXTBOOKS; *BIBLIOGRAPHIES; *INDUSTRIAL ARTS

ABSTRACT - FIFTY-SIX TEXTBOOKS ADOPTED FOR INDUSTRIAL ARTS COURSES IN ELEMENTARY, JUNIOR HIGH, AND SENIOR HIGH SCHOOLS FOR A 5-YEAR PERIOD BEGINNING JULY 1, 1967 ARE LISTED. THE PUBLICATION DATES RANGE FROM 1957 THROUGH 1966. THEY ARE CATEGORIZED BY COURSES WITHIN GRADE LEVELS. TEXTBOOK TITLE, PUBLICATION DATE, AUTHOR, PUBLISHER, CONTRACT PRICE, AND EXCHANGE PRICE ARE GIVEN. (EM)

VT 003 977
HOVERSON, BURTON R.
JUNIOR HIGH SCHOOL METALS, A CURRICULUM GUIDE.

SAINT PAUL PUBLIC SCHOOLS, MINN.
PUBLICATION-324
PUB DATE - 67 72P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *METALS; JUNIOR HIGH SCHOOLS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE OF TEACHERS FOR USE BY TEACHERS IN 180-HOUR JUNIOR HIGH INDUSTRIAL ARTS METALS PROGRAMS. THE PHILOSOPHY OF INDUSTRIAL ARTS EDUCATION, THE JUNIOR HIGH SCHOOL STUDENTS, AND FLEXIBLE SCHEDULING ARE DISCUSSED. A BRIEF TOPIC OUTLINE SUGGESTS CONTENT RELATED TO (1) METAL MINING, EXTRACTION, AND PRODUCTION, AND (2) THE SOCIAL EFFECTS OF METALS DEPOSITS AND INDUSTRIES. SAMPLE UNITS PRESENTED ARE (1) PHYSICAL PROPERTIES OF METALS, (2) REFINING IRON ORE, (3) MASS PRODUCTION, AND (4) OCCUPATIONAL INFORMATION. PROJECT PLANS ARE INCLUDED FOR A CROSS PEEN HAMMER, TOOL TRAY, FUNNEL, SMALL PARTS STORAGE RACK, BARBECUE FORK AND SPATULA, DUST PAN, AND COOKIE CUTTERS. THE APPENDIXES CONTAIN (1) A SAFETY RULE LIST, (2) A SAFETY EXAMINATION, (3) A GLOSSARY OF INDUSTRIAL TERMS, (4) CROSSWORD PUZZLES, AND (5) BRIEF STORIES OF IRON, ANTIMONY, ALUMINUM, LEAD, NICKEL, ZINC, COPPER, AND PRECIOUS METALS. (EM)

VT 003 978
WOOD AND PLASTIC, A GUIDE FOR GRADES 10-11-12.

SAINT PAUL PUBLIC SCHOOLS, MINN.
PUBLICATION-313
PUB DATE - 66 42P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; *PLASTICS; SENIOR HIGH SCHOOLS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE OF TEACHERS FOR USE IN 180-HOUR HIGH SCHOOL INDUSTRIAL ARTS WOOD AND PLASTICS PROGRAMS. THE UNITS ARE (1) LET'S GET ORGANIZED, (2) LET'S GET STARTED, (3) CONSTRUCTING WITH MACHINE TOOLS, (4) UPHOLSTERING, (5) WOODTURNING, (6) PLASTICS--THE NEW MATERIAL FOR THE NEW AGE, (7) MASS PRODUCTION, AND (8) WOOD LAMINATION. EACH UNIT GIVES AN EXPLANATORY INTRODUCTION, OBJECTIVES, A PROJECT LIST, EQUIPMENT AND AIDS, REFERENCES, AND SUGGESTED TEACHING METHODS. THE TEACHER SHOULD BE AN INDUSTRIAL ARTS MAJOR, AND THE STUDENTS SHOULD BE IN GRADES 10 THROUGH 12. PHOTOGRAPHS, CARTOONS, AND DRAWINGS ARE INCLUDED. (EM)

VT 004 343
INDUSTRIAL ARTS METALWORKING, SECONDARY SCHOOLS FIRST YEAR. CURRICULUM BULLETIN, 1966-67 SERIES NO. 7.

NEW YORK CITY BOARD OF EDUCATION, N.Y.
BOARD OF EDUCATION OF THE CITY OF NEW YORK, PUBLICATIONS SALES OFFICE, 110 LIVINGSTON STREET, BROOKLYN, NEW YORK 11201 ($5.00).
PUB DATE - 67 201P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *METALS; SECONDARY SCHOOLS; CLASSROOM TECHNIQUES; *COURSE CONTENT; INSTRUCTIONAL MATERIALS

ABSTRACT - AFTER EXAMINING THE METAL INDUSTRY IN NEW YORK AND INVESTIGATING CURRENT PRACTICES IN INDUSTRIAL ARTS, A CURRICULUM COMMITTEE DEVELOPED THIS GUIDE FOR TEACHER USE IN PLANNING A FIRST-YEAR COURSE IN METALWORKING. SUGGESTIONS ARE GIVEN FOR CLASS ORGANIZATION, STUDENT GUIDANCE, THE PROJECT METHOD OF TEACHING AND TESTING. SEPARATE SECTIONS, EACH OFFERING PROJECT IDEAS, SAMPLE

LESSON PLAN, SAMPLE RELATED LESSON PLAN, SAMPLE TEST, AND LIST OF RELATED MATERIALS, COVER: (1) BENCH METAL, (2) MACHINE METAL, (3) SHEET METAL, (4) ART METAL AND JEWELRY, (5) CAST METAL, AND (6) WROUGHT METAL. THE ACTIVITIES, DEMONSTRATIONS, AND RELATED INFORMATION FOR EACH OF THE SECTIONS ARE LISTED SEPARATELY IN THE CHAPTER ON COURSE CONTENT. DETAILED INFORMATION IS GIVEN FOR CONDUCTING A UNIT ON MASS PRODUCTION. A BIBLIOGRAPHY IS INCLUDED. (DM)

VT 004 592 ED 020 349
BOHN, RALPH C.
NDEA TITLE XI INSTITUTE FOR ADVANCED STUDY IN INDUSTRIAL ARTS (SAN JOSE STATE COLLEGE, JUNE 19-JULY 28,N1967). FINAL TECHNICAL REPORT .

PUB DATE - 67 96P.

DESCRIPTORS - *INSTITUTES (TRAINING PROGRAMS); *INDUSTRIAL ARTS; PROGRAM DESCRIPTIONS; *PROGRAM EVALUATION; PARTICIPANT INVOLVEMENT; CURRICULUM DEVELOPMENT; INSTRUCTIONAL IMPROVEMENT; *MATERIAL DEVELOPMENT; *INSTRUCTIONAL MATERIALS

ABSTRACT - THE INSTITUTE WAS HELD TO IMPROVE INSTRUCTION AND UPDATE CURRICULUM OFFERINGS THROUGH THE DEVELOPMENT OF NEW INSTRUCTIONAL MATERIALS AND PROCEDURES WHEREBY INDUSTRIAL MATERIALS MAY BE INTEGRATED INTO THE LABORATORY ACTIVITIES OF INDUSTRIAL ARTS PROGRAMS. THE 24 PARTICIPANTS WERE TEACHER EDUCATORS, SUPERVISORS, AND TEACHERS FROM 16 STATES. PHASE I WAS DEVOTED TO A TECHNOLOGICAL STUDY OF CHEMICAL, PHYSICAL, AND MECHANICAL PROPERTIES OF INDUSTRIAL MATERIALS. DURING PHASE II THE PARTICIPANTS UTILIZED THE TECHNICAL INSTRUCTION OF PHASE I TO DEVELOP 60 UNITS OF INSTRUCTION BASED ON INDUSTRIAL MATERIALS. THE DEVELOPMENT OF THESE UNITS INVOLVED THE BUILDING AND TESTING OF DEMONSTRATION MODELS FOR USE AS INSTRUCTIONAL MEDIA. A DAY-BY-DAY DESCRIPTION OF THE INSTITUTE PROGRAM, AN EVALUATION REPORT AND DETAILS OF THE ADMINISTRATION OF THE INSTITUTE ARE INCLUDED. (EM)

VT 004 596
HANDBOOK FOR INSTRUCTORS OF INDUSTRIAL ARTS AND VOCATIONAL EDUCATION . TPS-CURRICULUM BULL-6.

TULSA PUBLIC SCHOOLS, OKLA. DIV. OF INSTRUCTION
PUB DATE - 65 68P.

DESCRIPTORS - *TEACHING GUIDES; *PROGRAM GUIDES; *INDUSTRIAL ARTS; *VOCATIONAL EDUCATION; JUNIOR HIGH SCHOOLS; HIGH SCHOOLS; ELEMENTARY SCHOOLS; SCHOOL SHOPS; CURRICULUM; EQUIPMENT

ABSTRACT - THIS GUIDE WAS DEVELOPED BY ADMINISTRATIVE PERSONNEL FOR USE BY TEACHERS IN OPERATING PROGRAMS IN THE TULSA SCHOOL SYSTEM. THE OBJECTIVES, A STATEMENT OF BELIEFS, AND THE PHILOSOPHY OF VOCATIONAL INDUSTRIAL EDUCATION ARE DISCUSSED. A DESCRIPTION OF THE INDUSTRIAL ARTS AND VOCATIONAL EDUCATION PROGRAM COVERS THE ELEMENTARY THROUGH ADULT LEVELS OF INSTRUCTION, SUGGESTED COURSES, AND COOPERATIVE TRAINING. SPECIFIC DIRECTIONS ARE GIVEN FOR (1) OPENING THE SHOP FOR THE NEW YEAR, (2) MANAGING SHOP FINANCE, (3) ORGANIZING PERSONNEL, (4) INSURING SAFETY, (5) TEACHING, WHICH INCLUDES LESSON PLANNING, METHODS, MATERIALS, CONTENT, RELATED STUDY, PRACTICAL WORK, CURRICULUM GUIDES, AND PROJECTS, (6) ACQUIRING AND USING SUPPLIES, (7) EVALUATING STUDENTS AND SELF, (8) PREPARING FOR A SUBSTITUTE TEACHER, (9) CLOSING THE SHOP AT THE END OF THE YEAR, WHICH INCLUDES MAKING INVENTORIES, STORING EQUIPMENT, REQUISITIONING NEW SUPPLIES AND EQUIPMENT, AND COMPLETING STATE AND SCHOOL REPORTS, AND (10) ATTAINING PROFESSIONAL GROWTH. (BS)

VT 004 636
EXPERIMENTS AND INSTRUCTIONAL UNITS FOR INDUSTRIAL MATERIALS AS AN INTEGRATED PART OF THE INDUSTRIAL ARTS , PREPARED AT NDEA TITLE XI INSTITUTE FOR ADVANCED STUDY IN INDUSTRIAL ARTS (SAN JOSE STATE COLLEGE, CALIFORNIA, JUNE 19-JULY 28, 1967).

PUB DATE - 67 233P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; UNITS OF STUDY (SUBJECT FIELDS); HIGH SCHOOLS; *LABORATORY EXPERIMENTS

ABSTRACT - THESE UNITS WERE DEVELOPED FOR TEACHER USE IN PRESENTING VARIOUS INDUSTRIAL MATERIALS AND THEIR CHARACTERISTICS TO INDUSTRIAL ARTS STUDENTS. THE 58 UNITS ARE GROUPED BY THE TOPICS: (1) ELECTRICITY, (2) FUELS AND LUBRICANTS, (3) GRAPHIC ARTS, (4) LEATHER, (5) METAL, (6) PLASTICS, AND (7) WOOD. TWO NONCLASSIFIED UNITS ARE "A BEAM DEFLECTION TESTING DEVICE" AND "STRENGTH TESTING APPARATUS." EACH UNIT INCLUDES (1) GRADE LEVEL, (2) OBJECTIVES, (3) MATERIALS AND EQUIPMENT, (4) OUTLINE OF UTILIZATION PROCESS, (5) DEFINITION OF TERMS, (6) REFERENCES, AND (7) AN ILLUSTRATION. ALSO INCLUDED ARE DRAWINGS OF AN ABRASION TESTER FOR PAPER, AN ELASTICITY-PLASTICITY DEMONSTRATION BOARD, AN IMPACT TESTER, A WOOL ABRASION TESTER, AND SAMPLE PREPARATIONS FOR METAL ETCHING AND POWDER METALLURGY. THE DOCUMENT IS LOOSE LEAF AND DITTOED EXCEPT FOR THE ILLUSTRATIONS WHICH ARE LITHOGRAPHED. (EM)

VT 004 684
REFERENCE AND AUDIO-VISUAL MATERIALS ON IRON AND STEEL. A TEACHER'S GUIDE.

AMERICAN IRON AND STEEL INST., NEW YORK, N.Y.
PUB DATE - JUN66 96P.

DESCRIPTORS - *ANNOTATED BIBLIOGRAPHIES; TEACHING GUIDES; *INSTRUCTIONAL FILMS; VOCATIONAL EDUCATION; *INSTRUCTIONAL MATERIALS; ORIENTATION MATERIALS; *REFERENCE MATERIALS; *STEEL INDUSTRY

ABSTRACT - THIS ANNOTATED BIBLIOGRAPHY IS FOR TEACHER USE IN SELECTING RESOURCE MATERIALS FOR UNITS OR COURSES TREATING IRON AND STEEL. OVER 450 PAMPHLETS, BOOKS, CHARTS, FILMS, AND

FILMSTRIPS WHICH ARE AVAILABLE FROM 47 COMPANIES ARE GIVEN UNDER THESE HEADINGS: (1) HISTORY AND DEVELOPMENT, (2) VISITS TO MILLS, (3) REPORTS OF PROGRESS, (4) JOB OPPORTUNITIES, (5) TECHNICAL INFORMATION, (6) PRODUCTS IN USE, AND (7) PRODUCTION. THESE MATERIALS ARE CODED FOR USE IN SEVERAL LEVELS AND AREAS SUCH AS VOCATIONAL EDUCATION, INDUSTRIAL ARTS, ENGINEERING, SCIENCE, MATHEMATICS, SOCIAL STUDIES, ECONOMICS, AND GUIDANCE. INDEXES ARE INCLUDED FOR TITLES AND COMPANY SOURCES. (EM)

VT 004 806
MIKLUS, SAMUEL
TEACHER GUIDE FOR AIRBRUSH.

NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF VOCATIONAL EDUCATION
RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J. VOCATIONAL-TECHNICAL CURRICULUM LABORATORY, RUTGERS UNIVERSITY, 10 SEMINARY PLACE, NEW BRUNSWICK, NEW JERSEY 08903 ($1.50).
PUB DATE - MAR67 82P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; *ILLUSTRATORS; *AIRBRUSHES; HIGH SCHOOLS; STUDENT PROJECTS

ABSTRACT - THIS GUIDE WAS PREPARED BY AN INDIVIDUAL TEACHER AND THE DIVISION OF VOCATIONAL EDUCATION FOR USE IN TEACHING AIRBRUSH TECHNIQUES IN ART CLASSES. SECTIONS ARE (1) OBJECTIVES, (2) GENERAL INFORMATION, (3) EQUIPMENT AND MATERIALS, (4) PREPARATION OF PROJECTS, (5) PROCEDURE FOR SETTING UP EQUIPMENT, (6) THE AIRBRUSH PROCESS, (7) CLEANING AND MAINTENANCE, (8) ERRORS--CAUSES AND REMEDIES, (9) NINE ILLUSTRATED RENDERING PROJECTS, AND (10) PHOTO RETOUCHING. THE PROJECTS WERE DESIGNED TO PROVIDE PRACTICE WITH EVEN TONES AND WITH GRADUATED TONES ON PYRAMIDS, CYLINDERS, SPHERES, CUBES, AND TWO-MATERIAL FLANGED CYLINDERS. LISTS OF AIRBRUSH MANUFACTURERS AND SOURCES OF EQUIPMENT AND SUPPLIES ARE INCLUDED. (EM)

VT 004 851
GENERAL INDUSTRIAL ARTS (MANUFACTURING) , A COURSE OF STUDY FOR GRADES 7, 8, OR 9.

GEORGIA STATE DEPT. OF EDUCATION, ATLANTA. INDUSTRIAL ARTS EDUCATION
PUB DATE - 67 266P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *MANUFACTURING; GRADE 7; GRADE 8; GRADE 9; LESSON PLANS

ABSTRACT - A REVISION OF THE 1960 EDITION, THIS CURRICULUM GUIDE WAS DEVELOPED BY GRADUATE STUDENTS AND A TEACHER-EDUCATOR FOR USE BY TEACHERS IN PLANNING A FLEXIBLE 1-YEAR COURSE IN MANUFACTURING FOR GRADES SEVEN, EIGHT, OR NINE. THE INTRODUCTION GIVES THE UNDERLYING PHILOSOPHY, COURSE OBJECTIVES, AND AN ORGANIZATION CHART. THE 37 LESSON PLANS COVER (1) GENERAL PROCEDURES DEALING WITH PLANNING, SELECTING MATERIALS, ASSEMBLING, FINISHING, CARING FOR EQUIPMENT, SELECTING AND USING INDUSTRIAL PRODUCTS AND CONSIDERING INDUSTRIAL ARTS TEACHING AS A CAREER, AND (2) SPECIFIC LESSONS DEALING WITH DRAFTING, WOODS, METALS, ELECTRICITY, GRAPHIC ARTS, POWER, AND INDUSTRY. MOST LESSON PLANS INCLUDE OBJECTIVES, TIME REQUIRED, INSTRUCTIONAL AIDS, INTRODUCTION, SUBJECT MATTER OUTLINE, SUMMARY QUESTIONS, AN ASSIGNMENT, AND METHODS OF TESTING, AND REFERENCES. THE TIME REQUIRED FOR EACH LESSON RANGES FROM ONE TO 10 PERIODS. SUGGESTED STUDENT ACTIVITIES AND SAMPLE JOB ASSIGNMENT AND INFORMATIONAL ASSIGNMENT SHEETS FOR WRITTEN EXERCISES ARE INCLUDED. (EM)

VT 005 128
SAITO, THOMAS, AND OTHERS
REVISED APPROVED BOOK LIST, INDUSTRIAL ARTS, GRADES K-12 .

HAWAII STATE DEPT. OF EDUCATION, HONOLULU. VOCATIONAL, POST-HIGH AND ADULT EDUCATION BRANCH
PUB DATE - NOV67 62P.

DESCRIPTORS - *BIBLIOGRAPHIES; *INDUSTRIAL ARTS; ELEMENTARY GRADES; HIGH SCHOOLS; *TEXTBOOKS; *REFERENCE MATERIALS; *PERIODICALS

ABSTRACT - THIS BOOKLIST, DEVELOPED TO COMPLEMENT THE "REVISED INDUSTRIAL ARTS GUIDE, K-12" AND COMPILED ON THE BASIS OF A REVIEW AND EVALUATION BY MEMBERS OF THE APPROVED BOOK LIST COMMITTEE, INCLUDES PERIODICALS, BASAL OR STANDARD TEXTBOOKS, SUPPLEMENTARY TEXTBOOKS, ENRICHMENT BOOKS, AND PROFESSIONAL OR TECHNICAL BOOKS CLASSIFIED ON THREE LEVELS ACCORDING TO GRADES. ITEMS IN LEVEL III, GRADES 9-12, ARE CLASSIFIED UNDER DRAFTING AND DESIGN, ELECTRICITY AND ELECTRONICS, GENERAL INDUSTRIAL ARTS, GRAPHIC ARTS, METALS, PLASTICS, POWER AND TRANSPORTATION, RESEARCH, AND DEVELOPMENT AND WOODS. PROFESSIONAL BOOKS RECOMMENDED FOR ALL INDUSTRIAL ARTS DEPARTMENTS AND PERIODICALS RECOMMENDED FOR ALL INDUSTRIAL ARTS TEACHERS AND STUDENTS ARE LISTED SEPARATELY. OF 451 CITATIONS, SOME OF WHICH CONTAIN MULTIPLE ITEMS, MOST WERE PUBLISHED AFTER 1950. THE AUTHOR, TITLE, PUBLISHER, DATE, GENERAL READING LEVEL, AND PRICE ARE INDICATED FOR THE BOOKS, AND THE PUBLISHER'S ADDRESS FOR PERIODICALS. THE APPENDIX CONTAINS FORMS FOR USE IN NOMINATING AND EVALUATING ADDITIONAL MATERIALS FOR THIS BOOK LIST. (EM)

VT 005 164
HAY, EARL
EARLY SECONDARY INDUSTRIAL ARTS . AN INSTRUCTIONAL GUIDE.

NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF SECONDARY CURRICULUM DEVELOPMENT
PUB DATE - 67 152P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *JUNIOR HIGH SCHOOLS

ABSTRACT - DESIGNED FOR TEACHER USE, THE GUIDE DEVELOPS AND ESTABLISHES MINIMUM INSTRUCTIONAL CONTENT FOR TWO SEMESTERS OF INDUSTRIAL ARTS IN THE EARLY SECONDARY GRADES. IT WAS DEVELOPED AT A STATE CURRICULUM WORKSHOP BY COMMITTEES OF

EXPERIENCED TEACHERS AND STATE EDUCATION DEPARTMENT PERSONNEL. THE MATERIAL, DESIGNED TO MEET NATIONAL EDUCATIONAL OBJECTIVES, WAS PRESENTED TO INDUSTRIAL ARTS LEADERS AT AN ANNUAL STATE CONFERENCE FOR EVALUATION AND CRITICISM, AND THEIR RECOMMENDATIONS WERE CONSIDERED IN THE PREPARATION OF THE FINAL MANUSCRIPT BY THE SUPERVISOR OF VOCATIONAL CURRICULUM. THE PROGRAM ORGANIZATION IS BASED ON 25 PERCENT ORGANIZED GROUP INSTRUCTION, 75 PERCENT PERSONALIZED INSTRUCTION AND MANIPULATIVE EXPERIENCE, 80 PERCENT OF GROUP INSTRUCTION TIME DEVOTED TO LESSON CONTENT, AND TEACHER ADDITION OF LESSONS AND CONTENT TO ENRICH AND EXPAND ALL AREAS. THE CONTENT DISTRIBUTION FOR THE FIRST SEMESTER IS (1) WOODS, 40 PERCENT, (22 LESSONS), (2) CERAMICS, 22.5 PERCENT, (15 LESSONS), (3) PLASTICS, 22.5 PERCENT, (11 LESSONS), AND (4) DRAFTING, 15 PERCENT, (10 LESSONS). CONTENT DISTRIBUTION FOR THE SECOND SEMESTER IS (1) METALS, 30 PERCENT, (16 LESSONS), (2) ELECTRICITY, 25 PERCENT, (15 LESSONS), (3) GRAPHIC ARTS, 20 PERCENT, (13 LESSONS), AND (4) POWER MECHANICS, 25 PERCENT, (14 LESSONS). EACH LESSON INCLUDES THE DESIRED STUDENT UNDERSTANDING, A DESCRIPTION, AND SUGGESTED APPLICATIONS. SUPPLEMENTARY MATERIALS INCLUDE (1) INFORMATION ON A LINE PRODUCTION UNIT, COMMUNITY RESOURCES, INSTRUCTIONAL MEDIA, AND BASIC INDUSTRIAL ARTS CURRICULUM PATTERNS, AND (2) EXAMPLES OF SEMESTER SCHEDULES AND A WEEKLY PLANBOOK PAGE. (EM)

VT 005 279
THE PRE-TECHNICAL PROJECT, A DEMONSTRATION IN EDUCATION FOR TECHNOLOGY. ENGINEERING TECHNOLOGY, 11TH AND 12TH YEAR .

NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y. BUREAU OF CURRICULUM DEVELOPMENT
CORRELATED AND PRE-TECHNICAL PROGRAMS, 480 PACIFIC STREET, BROOKLYN, NEW YORK 11217 (SINGLE COPIES TO SCHOOLNSYSTEMS WITHOUT CHARGE).
PUB DATE - SEP67 256P.

DESCRIPTORS - PROGRAM GUIDES; *CURRICULUM GUIDES; INDUSTRIAL ARTS; *TEACHING GUIDES; *ENGINEERING; GRADE 11; GRADE 12; EXPERIMENTAL CURRICULUM; *PRETECHNOLOGY PROGRAMS; UNDERACHIEVERS; TEACHING METHODS; PROGRAM DEVELOPMENT
IDENTIFIERS - ENGINEERING TECHNOLOGY

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE OF TEACHERS, AND REVISED AFTER CLASSROOM USE FOR USE IN COMPREHENSIVE HIGH SCHOOLS WITH 11TH AND 12TH GRADE STUDENTS WHO ARE PLANNING POST-SECONDARY EDUCATION IN ENGINEERING TECHNOLOGY. THE PROGRAM EMPHASIZES A TEAM TEACHING APPROACH TO INTERDISCIPLINARY CORRELATION OF SUBJECT MATTER AND A LABORATORY ORIENTATION OF THE CURRICULUM. IT WAS CONCEIVED AS A SYSTEM OF REMOTIVATION FOR UNDERACHIEVING STUDENTS. SUGGESTED UNITS FOR THE GRADE 11 ARE (1) MEASUREMENTS, (2) COMPOSITION AND RESOLUTION OF FORCES, (3) WORK, ENERGY, AND POWER, (4) SIMPLE MACHINES, (5) TRANSFORMATION OF ENERGY, (6) HEAT, (7) MECHANICS OF FLUIDS, (8) LIGHT, (9) SOUND, AND (10) MOTION. SUGGESTED UNITS FOR GRADE 12 ARE (1) MAGNETISM AND STATIC ELECTRICITY, (2) CURRENT ELECTRICITY, (3) ELECTRONICS, (4) ELECTROCHEMISTRY, AND (5) NUCLEAR ENERGY. EACH UNIT GIVES SUGGESTED OBJECTIVES, TOPICS, AND ACTIVITIES. STUDENT SELECTION SHOULD BE ON THE BASIS OF UNFULFILLED ACADEMIC POTENTIAL AND MARGINAL ACHIEVEMENT AT THE END OF GRADE 10. THE SUGGESTED TIME ALLOTMENT IS 16.5 CLOCK HOURS PER WEEK. SUPPLEMENTARY MATERIALS INCLUDE (1) INFORMATION ON GENERAL METHODOLOGY AND SPECIFIC TEACHING METHODS FOR SCIENCE, INDUSTRIAL ARTS LABORATORY, ENGINEERING ENGLISH, AND ENGINEERING MATHEMATICS, (2) EXAMPLES OF ADMINISTRATIVE AIDS, AND (3) LINE DRAWING ILLUSTRATIONS. OTHER DOCUMENTS IN THE SERIES CONCERN MEDICAL TECHNOLOGY (VT 005 278) AND BUSINESS TECHNOLOGY FOR GRADE 11 (VT 005 280) AND GRADE 12 (VT 005 281). FOR VT 005 278 SEE ED 019 496, OCTOBER 68 RIE. (EM)

VT 005 593
INTRODUCTION TO THE TECHNICAL CORES I AND II .

SANTANA VOCATIONAL TECHNICAL CENTER, CALIF.
PUB DATE - 67 23P.

DESCRIPTORS - *INDUSTRIAL EDUCATION; HIGH SCHOOLS; COURSE OBJECTIVES; OCCUPATIONAL GUIDANCE; *COURSE DESCRIPTIONS; PROGRAM DESCRIPTIONS; CURRICULUM; LABORATORIES; *DISCOVERY LEARNING; *EDUCATIONAL FACILITIES; RESOURCE CENTERS

ABSTRACT - TECHNICAL CORE I, A 9TH GRADE COURSE, INVOLVES A PROBLEM-SOLVING APPROACH IN AN INDUSTRIAL LABORATORY SETTING WHERE ONLY THE PROBLEMS, RESOURCES, AND GUIDANCE ARE PROVIDED. NO DIRECT ANSWERS ARE GIVEN BY THE TEACHER. THE PROBLEMS COVER AND REINFORCE BASIC SCIENTIFIC PRINCIPLES AND INVOLVE SEVERAL MATERIALS AND PROCESSES. TECHNICAL CORE II, A 10TH GRADE COURSE, INVOLVES 24 WEEKS OF BASIC EXPERIENCES WITH SCIENTIFIC PRINCIPLES AND TECHNICAL PROCESSES, 4 WEEKS OF WORK ON A SPECIFIC INDUSTRIAL PROBLEM, AND 8 WEEKS OF WORK ON A SECOND MORE INDIVIDUALIZED PROBLEM. COURSES FOR GRADES 11 AND 12 ARE OF A VOCATIONAL OR TECHNICAL NATURE AND UPON COMPLETION OF THE FACILITIES WILL INCLUDE: (1) ELECTRO-MECHANICAL TECHNOLOGY, (2) PLASTICS AND SYNTHETIC TECHNOLOGY, (3) INDUSTRIAL DRAWING AND DESIGN, (4) INSTRUMENTATION, (5) POWER MECHANICS, (6) ELECTRONIC ASSEMBLY TECHNOLOGY, (7) ELECTRONIC TECHNOLOGY, (8) AUTO BODY RECONDITIONING, (9) BUILDING CONSTRUCTION TECHNOLOGY, AND (10) VOCATIONAL AUTO SHOP. DURING THE 4-YEAR PROGRAM STUDENTS HAVE ACCESS TO AN INDIVIDUALIZED OCCUPATIONAL GUIDANCE PROGRAM INVOLVING TESTING AND EDUCATIONAL ACTIVITIES. STUDENT COMPETENCIES ARE LISTED FOR ALL COURSES WHICH ARE DESCRIBED. (EM)

VT 005 595 ED 020 429
DEVORE, PAUL W.
STRUCTURE AND CONTENT FOUNDATIONS FOR CURRICULUM DEVELOPMENT .

AMERICAN INDUSTRIAL ARTS ASSOCIATION, WASHINGTON, D.C.

AMERICAN INDUSTRIAL ARTS ASSOCIATION, NATIONAL EDUCATION ASSOCIATION, 1201 SIXTEENTH STREET, N.W., WASHINGTON,D.C. 20036 ($0.90).
PUB DATE - 66 24P.

DESCRIPTORS - *INDUSTRIAL ARTS; *TECHNOLOGY; *TAXONOMY; *CURRICULUM DEVELOPMENT; *CURRICULUM DESIGN; GENERAL EDUCATION; SOCIAL FACTORS; CULTURAL FACTORS

ABSTRACT - IT IS PROPOSED THAT AN INDUSTRIAL ARTS CURRICULUM BE BASED ON THE CONCEPT OF MAN AS A CREATOR OF TECHNOLOGY. TECHNOLOGY IS A MAJOR AMERICAN SOCIETAL BASE INVOLVING PRACTICALLY ALL CITIZENS AND SHOULD BE ESTABLISHED AS A DISCIPLINE TO ELIMINATE CONFUSION AND LACK OF DIRECTION IN THE CURRICULUM. A MACROTECHNOLOGICAL ANALYSIS IDENTIFYING A UNIVERSE OF CONTENT WHICH IS IN KEEPING WITH THE PRINCIPLES OF DISCIPLINE STRUCTURES AND GENERAL EDUCATION IS OFFERED AS A MEANS OF DEFINING A TAXONOMY TO SERVE CURRICULUM PLANNING. A TAXONOMY OF TECHNOLOGY CONSISTS OF BOTH TECHNICAL AND CULTURAL-SOCIAL ELEMENTS WITH THE MAJOR TECHNICAL AREAS BEING PRODUCTION, COMMUNICATION, AND TRANSPORTATION WHICH MEET TAXONOMETRIC SELECTION CRITERIA INCLUDING THAT OF UNIVERSALISM. ILLUSTRATIVE EXAMPLES INDICATE 10 LEVELS OF SPECIFICITY IN THE PROPOSED TAXONOMY. MAJOR STEPS IN CURRICULUM DEVELOPMENT, UTILIZING THE TAXONOMY AS A CONTEXT RESERVOIR, ARE TO ESTABLISH THE TAXONOMY, THE BASIC CONCEPTS AND PRINCIPLES, UNITS OF CONTENT INSTRUCTION BASED ON ANALYSES OF CONCEPTS AND PRINCIPLES, AND COURSES OF STUDY BY GROUPING LOGICAL COMBINATIONS OF INSTRUCTIONAL UNITS. SOME ADVANTAGES OF THIS APPROACH ARE THAT (1) CONTENT SELECTION CRITERIA ARE PROVIDED, (2) FLEXIBILITY, ADAPTABILITY, AND INTERNAL CONSISTENCY ARE INTRINSIC, (3) PROGRAMS RATHER THAN ISOLATED COURSES ARE POSSIBLE, (4) TEACHER COMPETENCY CAN BE INCREASED THROUGH SPECIALIZATION, AND (5) A BASE IS PROVIDED FOR LIFETIME STUDY AND PROFESSIONAL CONTRIBUTION BY TEACHERS. IT IS RECOMMENDED THAT THE PROFESSION, THROUGH THE AMERICAN INDUSTRIAL ARTS ASSOCIATION, ESTABLISH A PERMANENT COMMITTEE FOR DERIVING A TAXONOMETRIC STRUCTURE FOR THE INDUSTRIAL ARTS. THIS DOCUMENT IS AVAILABLE FOR 90 CENTS FROM AMERICAN INDUSTRIAL ARTS ASSOCIATION, NATIONAL EDUCATION ASSOCIATION, 1201 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20036. (EM)

VT 005 650
STATE CURRICULUM GUIDE FOR INDUSTRIAL ARTS AND VOCATIONAL ELECTRICIT-ELECTRONICS .

VIRGINIA STATE DEPT. OF EDUCATION, RICHMOND. INDUSTRIAL EDUCATION SERVICE
PUB DATE - NOV67 60P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *ELECTRICIANS; *ELECTRICITY; *ELECTRONICS; *HIGH SCHOOLS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS AND SUPERVISORS FOR TEACHER USE IN COURSE PLANNING FOR HIGH SCHOOL INDUSTRIAL ARTS AND VOCATIONAL COURSES IN ELECTRICITY AND ELECTRONICS. TOPICAL COURSE OUTLINES ARE: (1) EXPLORATORY ELECTRICITY-ELECTRONICS, 45-90 HOURS, (2) FUNDAMENTAL ELECTRICITY-ELECTRONICS, 180 HOURS, (3) VOCATIONAL BASIC ELECTRICITY-ELECTRONICS, 360 HOURS, (4) RELATED MATHEMATICS, 180 HOURS, (5) VOCATIONAL APPLIED ELECTRONICS, 360 HOURS, AND (6) RELATED SCIENCE, 180 HOURS, (7) VOCATIONAL INDUSTRIAL ELECTRICITY, 360 HOURS. SUPPLEMENTARY MATERIALS INCLUDE A SAMPLE INSTRUCTION UNIT, FACILITY STANDARDS AND SUGGESTED FLOOR PLANS, AN EQUIPMENT AND TOOL LIST, DEFINITIONS OF TYPICAL JOB TITLES, AND A GLOSSARY OF RELATED EDUCATIONAL TERMS. (EM)

VT 005 914
INSTRUCTOR'S GUIDE FOR PRINTING 1 AND 2. CURRICULUM BULLETIN NO. 11.

TULSA PUBLIC SCHOOLS, OKLA. DIV. OF INSTRUCTION
TULSA PUBLIC SCHOOLS, P.O. BOX 45208, TULSA, OKLAHOMA 74145 ($1.50).
PUB DATE - 63 119P.

DESCRIPTORS - *TEACHING GUIDES; *CURRICULUM GUIDES; *INDUSTRIAL EDUCATION; *GRAPHIC ARTS; *PRINTING; SECONDARY GRADES

ABSTRACT - PREPARED BY A TEACHER COMMITTEE AND CLASSROOM TESTED FOR TWO YEARS PRIOR TO PUBLICATION, THIS GUIDE IS FOR USE BY HIGH SCHOOL INDUSTRIAL ARTS OR VOCATIONAL INDUSTRIAL EDUCATION TEACHERS IN PLANNING AND IMPLEMENTING LESSONS IN PRINTING AND LITHOGRAPHY. THE CONTENT IS DIVIDED INTO SIX SECTIONS, THE FIRST FOUR OF WHICH DEAL WITH THE MORE THEORETICAL ASPECTS OF THE SUBJECT MATTER, AND THE LAST TWO, WITH PRACTICAL APPLICATIONS. MAJOR AREAS COVERED ARE: (1) THE PLACE OF PRINTING IN THE HIGH SCHOOL CURRICULUM, DEALING WITH OBJECTIVES AND OVERALL VALUE OF GRAPHIC ARTS, (2) ORGANIZATION TO ATTAIN OBJECTIVES, CONCERNED WITH SELECTION AND ORGANIZATION OF PROJECTS AND JOBS, (3) TEACHING PRINTING CLASSES IN SENIOR HIGH SCHOOL, COVERING SAFETY, JOB RELATIONS, AND PROBLEM HANDLING, AND (4) COURSE OUTLINE FOR PRINTING I AND II, INCLUDING SKILLS AND PROCESSES TO BE DEVELOPED AND UNDERSTOOD, RELATED AND TECHNICAL INFORMATION, SUGGESTED METHODS OF PRESENTATION, AND METHODS OF EVALUATION. OTHER SECTIONS INCLUDE SUGGESTED JOBS AND PROJECTS TO BE DONE, INFORMATION SHEETS FOR STUDENTS, AND TEXTS. RECOMMENDED COURSE LENGTH IS 180-360 HOURS AS A HIGH SCHOOL INDUSTRIAL ARTS PROGRAM, AND 540-1,080 HOURS IF TAUGHT IN A VOCATIONAL SCHOOL. THE INSTRUCTOR SHOULD HAVE CERTIFICATION IN THE SUBJECT AREA AND JOB EXPERIENCE. (AW)

VT 005 915
INSTRUCTOR'S GUIDE FOR SENIOR HIGH SCHOOL WOODWORK IN THE TULSA PUBLIC SCHOOLS (TENTATIVE). CURRICULUM BULLETIN NO. 12.

TULSA PUBLIC SCHOOLS, OKLA. DIV. OF INSTRUCTION
TULSA PUBLIC SCHOOLS, P.O. BOX 45208, TULSA, OKLAHOMA 74145 ($1.50).

PUB DATE - 67 135P.

DESCRIPTORS - *TEACHING GUIDES; *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; *LESSON PLANS; SENIOR HIGH SCHOOLS; SECONDARY GRADES

ABSTRACT - PREPARED BY A COMMITTEE OF SENIOR HIGH SCHOOL WOODWORKING TEACHERS, THIS GUIDE IS FOR USE BY INDUSTRIAL ARTS INSTRUCTORS IN PLANNING HIGH SCHOOL LEVEL COURSES AND LESSONS IN WOODWORKING. IT IS DESIGNED TO SERVE AS RESOURCE MATERIAL IN DEVELOPING A PROGRAM OF WOODWORKING AS WELL AS TO ASSIST THE TEACHER IN PREPARING AND PRESENTING DAILY WORK. CONTENTS INCLUDE: (1) GENERAL INFORMATION ON THE PLACE OF INDUSTRIAL ARTS, AND SPECIFICALLY WOODWORKING, IN THE SENIOR HIGH SCHOOL, (2) GENERAL PRINCIPLES OF PERSONNEL ORGANIZATION AND MANAGEMENT IN THE SHOP, (3) A UNIT PROVIDING TEACHING SUGGESTIONS, PRACTICAL WORK SUGGESTIONS, PROCEDURES, RELATED STUDIES, INSTRUCTOR'S GUIDE SHEETS, SAFETY HINTS, AND A BIBLIOGRAPHY, (4) TWO SECTIONS, "WOODWORK I AND II" AND "WOODWORK III AND IV," WHICH GIVE SPECIFIC TEACHING OUTLINES INCLUDING CLASSROOM PROCEDURES, PROJECT PLANNING, SKILLS AND PROCESSES TO BE DEVELOPED, TECHNICAL INFORMATION AND TEACHING AIDS, AND SUGGESTED PROJECTS, (5) A SECTION CONTAINING SAMPLE LESSON PLANS, AND (6) A SECTION ON STUDENT EVALUATION, INCLUDING A LIST OF SUGGESTED TESTS. A CERTIFIED WOODWORKING TEACHER SHOULD CONDUCT THE 180-360 HOUR COURSE. STUDENTS SHOULD HAVE AN INTEREST AND APTITUDE IN WOODWORKING. ADDITIONAL TEXTS AND REFERENCES SHOULD BE USED IN PRESENTING THE MATERIAL. (AW)

VT 005 963
PLASTIC PROJECTS. FIRST SEMESTER, INDUSTRIAL ARTS.

DENVER PUBLIC SCHOOLS, COLO.
DENVER PUBLIC SCHOOLS, 414 FOURTEENTH STREET, DENVER, COLORADO 80202 ($1.50).
PUB DATE - 64 78P.

DESCRIPTORS - *INDUSTRIAL ARTS; *PLASTICS; *STUDENT PROJECTS; INSTRUCTIONAL AIDS; TEACHING PROCEDURES; *INSTRUCTIONAL MATERIALS

ABSTRACT - DEVELOPED BY AN INDUSTRIAL ARTS CRAFTS COMMITTEE OF PUBLIC SCHOOL TEACHERS, THIS PROJECT BOOK IS FOR STUDENT USE IN CONSTRUCTING MORE THAN 35 PROJECTS IN A FIRST SEMESTER PLASTICS COURSE. THE WORK PLANS FOR EACH OF THE ILLUSTRATED PROJECTS INCLUDE A DESCRIPTION OF PROCESSES, SUGGESTED MATERIALS, AND RECOMMENDED TOOLS AND EQUIPMENT. A RELATED DOCUMENT IS AVAILABLE AS VT 005 964 (ALSO IN THIS ISSUE). (GR)

VT 005 964
INTERMEDIATE PLASTIC PROJECTS, INDUSTRIAL ARTS.

DENVER PUBLIC SCHOOLS, COLO. DEPT. OF GENERAL CURRICULUM SERVICES.
DENVER PUBLIC SCHOOLS, 414 FOURTEENTH STREET, DENVER, COLORADO 80202 ($1.00).
PUB DATE - 65 51P.

DESCRIPTORS - *INDUSTRIAL ARTS; *PLASTICS; *STUDENT PROJECTS; INSTRUCTIONAL AIDS; TEACHING PROCEDURES; *INSTRUCTIONAL MATERIALS

ABSTRACT - DEVELOPED BY AN INDUSTRIAL ARTS CRAFTS COMMITTEE OF PUBLIC SCHOOL TEACHERS, THIS INTERMEDIATE PLASTIC PROJECTS BOOK FOR STUDENT USE PROVIDES WORK PLANS FOR CONSTRUCTING 20 PLASTICS PROJECTS. CONTENTS INCLUDE A DESCRIPTION OF PROCESSES, SUGGESTED MATERIALS, RECOMMENDED TOOLS AND EQUIPMENT, AND STUDY REFERENCES FOR EACH OF THE ILLUSTRATED PROJECTS. A RELATED DOCUMENT IS AVAILABLE AS VT 005 963 (ALSO IN THIS ISSUE). (GR)

VT 006 155 **ED 041 099**
LARSEN, DELMAR L.; NELSON, HERBERT L.
ELEMENTARY SCHOOL INDUSTRIAL ARTS--SELECTED READINGS AND RESOURCES.

EASTERN MICHIGAN UNIV., YPSILANTI. DEPT. OF INDUSTRIAL EDUCATION.
PUB DATE - 68 197P.

DESCRIPTORS - *TEXTBOOKS; *INDUSTRIAL ARTS; ELEMENTARY GRADES; *TEACHER EDUCATION; BIBLIOGRAPHIES; *RESOURCE MATERIALS

ABSTRACT - IN AN ATTEMPT TO DRAW TOGETHER SIGNIFICANT MATERIALS ON ELEMENTARY SCHOOL INDUSTRIAL ARTS, 26 JOURNAL ARTICLES, ADDRESSES, CHAPTERS OF BOOKS AND INSTRUCTIONAL MATERIALS, DATED FROM 1923 TO 1967, ARE REPRINTED IN SECTION I "PHILOSOPHY, OBJECTIVES, CURRICULUM, AND METHODOLOGY" AND SECTION II "IMPLEMENTATION OF INDUSTRIAL ARTS IN ELEMENTARY SCHOOL." SECTION III "SELECTED RESOURCES FOR ELEMENTARY SCHOOL INDUSTRIAL ARTS" INCLUDES RESOURCES DESCRIBING EDUCATIONAL EXHIBITS, CONSTRUCTION, AND TEACHING UNITS. ADDITIONAL REFERENCES ARE LISTED COVERING CURRICULUM, UNITS OF INSTRUCTION, ACTIVITIES, AND MATERIALS. (DM)

VT 006 235
BASIC AUTOMOBILE MECHANICS, CENTRAL HIGH SCHOOL, GRADES 9 AND 10 . CURRICULUM BULLETIN NUMBER 256.

CINCINNATI PUBLIC SCHOOLS
CINCINNATI PUBLIC SCHOOLS, 230 EAST NINTH STREET, CINCINNATI, OHIO 45202 ($2.50).
PUB DATE - 62 120P.

DESCRIPTORS - *AUTO MECHANICS; *AUTO MECHANICS (OCCUPATION); *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *TEACHING GUIDES; GRADE 9; GRADE 10; CURRICULUM GUIDES; TRANSPARENCIES

ABSTRACT - DEVELOPED BY TEACHERS AND SUPERVISORS FOR USE WITH HIGH SCHOOL STUDENTS IN VOCATIONAL CLASSES, THIS CURRICULUM BULLETIN MAY BE USED IN A FULL-YEAR COURSE MEETING 2 HOURS PER DAY IN BASIC AUTOMOBILE MECHANICS. THE CONTENTS INCLUDE AN INTRODUCTORY SECTION AND UNITS CONCERNING: (1) ORIENTATION, (2) ENGINE CONSTRUCTION AND COMPONENT PARTS, (3) LUBRICATION, (4) ENGINE COOLING SYSTEMS, (5) THE FUEL SYSTEM AND AUTOMOTIVE ENGINE FUELS, (6) IGNITION

SYSTEMS, (7) THE ELECTRICAL SYSTEM, AND (8) THE POWER TRAIN. EACH UNIT CONTAINS OBJECTIVES, CONTENT, VOCABULARY, SUGGESTED TEACHER ACTIVITIES, SUGGESTED PUPIL ACTIVITIES, EVALUATION, AUDIO-VISUAL AIDS, AND A BIBLIOGRAPHY. THE APPENDIX CONTAINS DEFINITIONS OF BASIC AUTO MECHANICS TERMINOLOGY, SAMPLE JOB SHEETS, A CLASS PROGRESS CHART, ELECTRICAL SYMBOLS, A LIST OF RELATED AND SHOP JOB ACTIVITIES, AND CHARTS AND DIAGRAMS OF AUTOMOBILE PARTS AND ASSEMBLIES. THE CHARTS AND DIAGRAMS ARE SUITABLE FOR REPRODUCTION AS OVERHEAD TRANSPARENCIES. (DM)

VT 006 236
DRAFTING STANDARDS MANUAL . CURRICULUM BULLETIN 290.

CINCINNATI PUBLIC SCHOOLS, OHIO
CINCINNATI PUBLIC SCHOOLS, 230 EAST NINTH STREET, CINCINNATI, OHIO 45202 ($2.00).
PUB DATE - 67 60P.

DESCRIPTORS - *MANUALS; *TRADE AND INDUSTRIAL EDUCATION; *INDUSTRIAL ARTS; DRAFTSMEN; *DRAFTING; *STANDARDS; HIGH SCHOOLS

ABSTRACT - THIS MANUAL IS FOR TEACHER OR STUDENT USE IN HIGH SCHOOL DRAFTING COURSES. IT WAS DEVELOPED BY VOCATIONAL TEACHERS AND SUPERVISORS TO PROVIDE AN ABRIDGED SET OF STANDARDS FOR HIGH SCHOOL DRAFTING COURSES. STANDARDS ARE ORGANIZED AS FOLLOWS: (1) DRAWING MATERIALS, (2) REPRODUCTION MATERIALS, (3) DRAWING SIZES, (4) DRAWING FORMAT, (5) TYPES OF DRAWING, (6) QUALITY OF DRAWINGS, (7) VIEWS AND SECTIONS, (8) DIMENSIONING, (9) TOLERANCE, AND (10) SURFACE FINISH. THE MATERIAL IS TO BE USED AS AN AID IN STANDARDIZING THE DRAWINGS AND PRACTICES OF STUDENT DRAFTSMEN. THE DOCUMENT IS PRINTED AND PROFUSELY ILLUSTRATED WITH LINE DRAWINGS AND PHOTOGRAPHS. SUPPLEMENTARY MATERIALS INCLUDE CHARTS GIVING DECIMAL EQUIVALENTS, NUMBER AND LETTER DRILL SIZES, AND MILLIMETER TO INCH CONVERSIONS. (EM)

VT 006 244
INDUSTRIAL ARTS CURRICULUM GUIDE FOR INDUSTRIAL CRAFTS IN OHIO SCHOOLS.

OHIO STATE DEPT. OF EDUCATION, COLUMBUS
OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
PUB DATE - NOV66 73P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *RESOURCE MATERIALS; *INDUSTRIAL ARTS; *HANDICRAFTS; SECONDARY GRADES; EDUCATIONAL EQUIPMENT; EQUIPMENT MANUFACTURERS; AUDIOVISUAL AIDS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS, TEACHER EDUCATORS, AND SUPERVISORS FOR USE BY APPROPRIATE PERSONNEL IN INDUSTRIAL ARTS CRAFTS PROGRAMS AT THE JUNIOR OR SENIOR HIGH SCHOOL LEVEL. EACH COURSE OUTLINE FOR JEWELRY, CERAMICS, LEATHER, AND PLASTICS INCLUDES: (1) DISCUSSION TOPICS, (2) REFERENCES, (3) TEACHING AIDS, (4) DEMONSTRATIONS OR EXPERIMENTS, (5) PROJECT ACTIVITIES, AND (6) AN EQUIPMENT AND SUPPLY LIST. (EM)

VT 006 246
INDUSTRIAL ARTS CURRICULUM GUIDE FOR DRAFTING .

OHIO STATE DEPT. OF EDUCATION, COLUMBUS
THE OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
PUB DATE - JUN67 40P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *DRAFTING; SECONDARY GRADES; PREVOCATIONAL EDUCATION; RESOURCE MATERIALS; EDUCATIONAL EQUIPMENT

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS, TEACHER EDUCATORS, AND SUPERVISORS FOR USE BY "APPROPRIATE PERSONNEL" IN JUNIOR AND SENIOR HIGH SCHOOL LEVEL DRAFTING PROGRAMS. FIFTEEN UNIT OUTLINES LIST (1) DISCUSSION TOPICS, (2) TEACHING AIDS, (3) GUIDANCE LITERATURE, (4) DEMONSTRATIONS OR EXPERIMENTS, (5) SUGGESTIONS FOR TEACHING, (6) TEXTBOOKS, AND (7) AN EQUIPMENT LIST. (EM)

VT 006 247
INDUSTRIAL ARTS CURRICULUM GUIDE FOR METALS.

OHIO STATE DEPARTMENT OF EDUCATION, COLUMBUS
OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
OHIO STATE DEPARTMENT OF EDUCATION, STATE OFFICE BUILDING, 65 SOUTH FRONT STREET, COLUMBUS, OHIO 43215 (NO CHARGE).
PUB DATE - JUN67 45P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *METALS; SECONDARY GRADES; INSTRUCTIONAL AIDS; STUDENT PROJECTS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS, TEACHER EDUCATORS, AND SUPERVISORS FOR USE IN INDUSTRIAL ARTS METALS PROGRAMS IN JUNIOR AND SENIOR HIGH SCHOOLS. IT WAS PLANNED TO ASSIST IN THE ORGANIZATION OF INSTRUCTIONAL UNITS. UNITS INCLUDE: (1) METALS AND THEIR CHARACTERISTICS, (2) PROJECT PLANNING, (3) MEASUREMENT TECHNIQUES, (4) SHOP ORGANIZATION AND SAFETY, (5) CUTTING TECHNIQUES, (6) FORMING TECHNIQUES, (7) CASTING AND FOUNDRY, (8) FASTENING TECHNIQUES, (9) FINISHING TECHNIQUES, AND (10) MASS PRODUCTION, MACHINE CONTROLS, AND AUTOMATION. EACH UNIT IS KEYED TO FIVE TEXTS: (1) LUDWIG AND LUDWIG, "METALWORK TECHNOLOGY AND PRACTICE," (MCKNIGHT AND MCKNIGHT, 1962), (2) FEIRER, "GENERAL METALS," (MCGRAW-HILL, 1959), (3) FEIRER AND TATRO, "MACHINE TOOL METALWORKING," (MCGRAW-HILL, 1961), (4) WALKER, "MODERN METALWORK," (GOODHART WILCOX, 1965), AND (5) JOHNSON, "GENERAL INDUSTRIAL MACHINE SHOP," (C.A. BENNETT, 1963). SUPPLEMENTARY MATERIALS INCLUDE: (1) A REFERENCE BIBLIOGRAPHY, (2) ADDRESSES OF REFERENCE SOURCES, (3) SOURCES OF AUDIO-VISUAL MATERIALS, (4) SOURCES OF EQUIPMENT AND SUPPLIES, AND (5) AN EQUIPMENT AND TOOL LIST. (EM)

VT 006 248
INDUSTRIAL ARTS CURRICULUM GUIDE FOR WOODWORKING .

OHIO STATE DEPT. OF EDUCATION, COLUMBUS

OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
OHIO STATE DEPARTMENT OF EDUCATION, STATE OFFICE BUILDING, 65 SOUTH FRONT STREET, COLUMBUS, OHIO 43215 (COPIES AVAILABLE WITHOUT CHARGE).
PUB DATE - NOV66 50P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *PREVOCATIONAL EDUCATION; *WOODWORKING; SECONDARY GRADES; TEACHING TECHNIQUES; INSTRUCTIONAL AIDS; BIBLIOGRAPHIES; STUDENT PROJECTS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS, TEACHER EDUCATORS, AND SUPERVISORS FOR USE IN COURSE PLANNING IN INDUSTRIAL ARTS WOODWORKING AT THE JUNIOR AND SENIOR HIGH SCHOOL LEVEL. ITS PURPOSE IS TO AID TEACHERS IN PRESENTING WOODS AS AN INTEGRAL PHASE OF INDUSTRIAL ARTS. UNITS INCLUDE OUTLINES FOR: (1) CARVING IN WOOD, (2) HOME CONSTRUCTION, (3) FURNITURE, (4) SPORTS EQUIPMENT, (5) WOODENWARE, (6) PATTERNMAKING, (7) MODELS, (8) WOOD TURNING, (9) LAMINATING AND FORMING, (10) MASS PRODUCTION IN WOODS, AND (11) FOREST PRODUCTS. EACH UNIT GIVES DISCUSSION TOPICS, TEACHING AIDS, DEMONSTRATIONS OR EXPERIMENTS, AND PROJECT ACTIVITIES. SUPPLEMENTARY MATERIALS INCLUDE A BIBLIOGRAPHY OF 101 TEXTBOOKS AND REFERENCES, A LIST OF TEACHING AIDS AND THEIR SOURCES, AND AN EQUIPMENT AND SUPPLY LIST. (EM)

VT 006 249
INDUSTRIAL ARTS CURRICULUM GUIDE FOR POWER MECHANICS.

OHIO STATE DEPT. OF EDUCATION, COLUMBUS
OHIO INDUSTRIAL ARTS ASSOCIATION, COLUMBUS
OHIO STATE DEPARTMENT OF EDUCATION, STATE OFFICE BUILDING, 65 SOUTH FRONT STREET, COLUMBUS, OHIO 43215 (COPIES AVAILABLE WITHOUT CHARGE).
PUB DATE - JAN68 141P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *PREVOCATIONAL EDUCATION; *POWER MECHANICS; AUTO MECHANICS; SECONDARY GRADES; BIBLIOGRAPHIES; *INSTRUCTIONAL AIDS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS, TEACHER EDUCATORS, AND SUPERVISORS AND IS FOR USE BY TEACHERS IN COURSE PLANNING FOR EITHER A POWER OR AUTOMOTIVE TECHNOLOGY PROGRAM IN JUNIOR AND SENIOR HIGH SCHOOLS. UNITS INCLUDE: (1) WIND POWER, (2) WATER POWER, (3) STEAM POWER, (4) SMALL GASOLINE ENGINES, (5) AUTOMOTIVES, (6) OUTBOARD MARINE POWER, (7) INBOARD MARINE POWER, (8) DIESEL ENGINES, (9) GAS TURBINES, (10) POWER TRANSMISSIONS. (11) HYDRAULIC AND PNEUMATIC POWER, (12) SOLAR ENERGY, (13) FUEL CELLS, AND (14) ATOMIC POWER. EACH UNIT GIVES (1) A TECHNICAL CONTENT OUTLINE, (2) APPROPRIATE TEXTBOOKS AND REFERENCES, (3) AUDIO-VISUAL AIDS, (4) TEACHING ACTIVITIES, AND (5) STUDENT ACTIVITIES. TOPICS ARE KEYED TO FOUR TEXTS, 107 REFERENCES, 79 FILMS, 70 FILMSTRIPS, 18 CHARTS, AND SIX TRANSPARENCY SETS. (EM)

VT 006 260
DRAFTING I . CURRICULUM BULLETIN 270.

CINCINNATI PUBLIC SCHOOLS, OHIO
CINCINNATI PUBLIC SCHOOLS, 230 EAST NINTH STREET, CINCINNATI, OHIO 45202 ($2.50).
PUB DATE - 67 84P.

DESCRIPTORS - *CURRICULUM GUIDES; *TRADE AND INDUSTRIAL EDUCATION; *INDUSTRIAL ARTS; DRAFTSMEN; *DRAFTING; GRADE 10

ABSTRACT - THIS CURRICULUM GUIDE FOR TEACHER USE IN PLANNING A DRAFTING COURSE FOR SOPHOMORES WAS DEVELOPED BY LOCAL TEACHERS AND SUPERVISORS AND WAS USED 1 YEAR BEFORE BEING PUBLISHED. THE CONTENTS OF 12 UNITS ARE ORGANIZED IN A SERIES OF CHARTS UNDER THESE HEADINGS: (1) OPERATIONS OR CONCEPTS, (2) WHAT THE PUPIL NEEDS TO KNOW, (3) RELATED INFORMATION, (4) REFERENCE INFORMATION, (5) SUGGESTED ASSIGNMENT, (6) ASSIGNMENT NUMBER, AND (7) INSTRUCTIONAL AIDS. THE UNITS ARE (1) USE OF DRAFTING MANUAL, (2) DRAFTING MATERIALS, (3) ORTHOGRAPHIC SKETCHING, (4) PICTORIAL SKETCHING, (5) DRAWING EQUIPMENT AND USE OF DRAWING INSTRUMENTS, (6) ENGINEERING LETTERING, (7) GEOMETRIC CONSTRUCTION, (8) MULTIVIEW PROJECTION, (9) DIMENSIONING, (10) SECTIONING, (11) FASTENERS, AND (12) ELEMENTARY WORKING DRAWINGS. THE MATERIAL IS TO BE USED 1 TO 2 HOURS PER DAY FOR 2 SEMESTERS. SUPPLEMENTARY MATERIALS INCLUDE (1) A BIBLIOGRAPHY OF FILMS, FILMSTRIPS, AND TRANSPARENCIES, (2) DIRECTIONS FOR SUBSTITUTE TEACHERS, (3) DESCRIPTION OF THE DRAFTING PROGRAM, AND (4) A LIST OF TEXTS AND REFERENCES. THE "DRAFTING STANDARDS MANUAL" (VT 006 236 AIM WINTER 1968) SHOULD BE USED WITH THIS GUIDE. (EM)

VT 006 262
ELECTRICITY I . CURRICULUM BULLETIN 276.

CINCINNATI PUBLIC SCHOOLS, OHIO
CINCINNATI PUBLIC SCHOOLS, 230 EAST NINTH STREET, CINCINNATI, OHIO 45202 ($2.50).
PUB DATE - 67 90P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *ELECTRICAL OCCUPATIONS; *ELECTRICITY; GRADE 10

ABSTRACT - THIS CURRICULUM GUIDE IS FOR TEACHER USE IN LESSON PLANNING FOR A SOPHOMORE COURSE COVERING BASIC ELECTRICITY. IT WAS DEVELOPED BY LOCAL TEACHERS AND SUPERVISORS TO PROVIDE INFORMATION RELATING TO INSTRUCTIONAL UNITS AND TEACHING PROCEDURES FOR A BASIC COURSE. THREE SECTIONS COVER (1) VISUAL AIDS, SUBSTITUTE TEACHERS, COURSE DESCRIPTIONS, AND BOOKS, (2) A COURSE OUTLINE, AND (3) PROCEDURES FOR 18 STUDENT EXPERIMENTS. COURSE UNITS ARE (1) INTRODUCTION TO ELECTRICITY, (2) BASIC CIRCUITS AND MEASUREMENT, (3) INDUCTANCE AND CAPACITANCE, (4) ALTERNATING CURRENT AND A.C. CIRCUITS, AND (5) REACTIVE CIRCUITS AND RESONANCE. EACH EXPERIMENT SHEET GIVES AN OBJECTIVE, REQUIRED MATERIALS, CUMULATIVE DATA, PROCEDURAL STEPS, AND REFERENCE QUESTIONS. THE MATERIAL IS TO BE USED IN PLANNING A 1-YEAR COURSE. SUPPLEMENTARY

MATERIALS INCLUDE A BIBLIOGRAPHY OF 28 FILMS AND FILMSTRIPS. (EM)

VT 006 323
INDUSTRIAL ARTS INSTRUCTIONAL GUIDE FOR GRADES K-6. ELEMENTARY SCHOOL PRACTICAL ARTS . PUBLICATION EC-150.

LOS ANGELES CITY SCHOOLS, CALIF. DIV. OF INSTRUCTIONAL SERVICES
PUB DATE - 63 103P.

DESCRIPTORS - *CURRICULUM GUIDES; *TEACHING GUIDES; *INDUSTRIAL ARTS; ELEMENTARY GRADES; *STUDENT PROJECTS

ABSTRACT - THIS CURRICULUM GUIDE IS A REVISION OF A 1953 GUIDE BY A LOCAL COMMITTEE OF TEACHERS, SUPERVISORS, AND PRINCIPALS. IT IS FOR USE BY ELEMENTARY TEACHERS AS A PRACTICAL REFERENCE IN PLANNING FOR THE INTEGRATION OF INDUSTRIAL ARTS ACTIVITIES IN THE DAILY PROGRAM OF KINDERGARTEN THROUGH GRADE 6. THE CONTENT IS ORGANIZED INTO THESE SECTIONS: (1) LOCAL EDUCATIONAL PHILOSOPHY, (2) KNOWLEDGE AND ACTIVITY OUTLINE, (3) SAFETY OUTLINE, (4) BASIC HAND TOOL OPERATIONS (ILLUSTRATED), (5) ILLUSTRATIONS AND DESCRIPTIONS OF TOOLS, OPERATIONS, AND MATERIALS, AND (6) PLANS FOR 50 SOCIAL SCIENCE, SCIENCE, AND PERSONAL INTEREST PROJECTS. (EM)

VT 006 430
THE NEW MEXICO STATE PLANNING GUIDE FOR INDUSTRIAL ARTS.

NEW MEXICO INDUSTRIAL ARTS ASSOCIATION
NEW MEXICO STATE DEPT. OF EDUCATION, SANTA FE
PUB DATE - 63 154P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; RESOURCE MATERIALS; *EDUCATIONAL PLANNING
IDENTIFIERS - NEW MEXICO

ABSTRACT - THIS PLANNING GUIDE, MEANT AS AN AID IN ESTABLISHING EFFICIENT INDUSTRIAL ARTS INSTRUCTION IN NEW MEXICO, IS FOR USE BY TEACHERS, ADMINISTRATORS, AND COUNSELORS. MAJOR SECTIONS OF THE GUIDE ARE (1) INTRODUCTION, (2) OBJECTIVES OF INDUSTRIAL ARTS, (3) PERSONNEL MANAGEMENT, (4) SAFETY IN THE SCHOOL SHOP, AND (5) CONTENT. THE LATTER SECTION CONTAINS 30 BRIEF OUTLINES SUGGESTING CONTENT FOR COURSES IN DRAFTING, ELECTRICITY, GRAPHIC ARTS, MECHANICS, WOODWORKING, METALWORKING, AND CRAFTS. INCLUDED WITH THE OUTLINES ARE OBJECTIVES, NECESSARY MATERIALS, SUGGESTED PROJECTS, AND INSTRUCTIONAL AIDS. A PHILOSOPHICAL STATEMENT CONCERNING THE STATE'S INDUSTRIAL ARTS PROGRAM IS INCLUDED. (EM)

VT 006 452
INDUSTRIAL ARTS GRADES 7-8. (TENTATIVE).

ROCHESTER CITY SCHOOL DISTRICT, N.Y. DIV. OF INSTRUCTION
PUB DATE - 67 116P.

DESCRIPTORS - *CURRICULUM GUIDES; GRADE 7; GRADE 8; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; JUNIOR HIGH SCHOOL STUDENTS; INDIVIDUAL CHARACTERISTICS; STUDENT PROJECTS

ABSTRACT - THE EXPERIMENTAL CURRICULUM MATERIALS FOR GRADES 7-8 WERE DEVELOPED BY TEAMS OF TEACHERS AND CONSULTANTS, TESTED IN THE CLASSROOM BETWEEN 1966 AND 1968, AND USED IN TEACHER TRAINING SESSIONS DURING THE SUMMER OF 1968. THE COURSE OUTLINE IS DIVIDED INTO AREAS BY GRADE LEVELS. GRADE 7 INCLUDES WOOD, CERAMICS, DRAWING, AND PLASTICS. GRADE 8 COVERS ELECTRICITY, GRAPHIC ARTS, METAL AND POWER. A 5-WEEK SEQUENTIAL TEACHING PLAN IS SUGGESTED FOR EACH INSTRUCTIONAL AREA. EACH UNIT CONTAINS INTRODUCTORY MATERIALS WHICH EXPLAIN THE UNIT OBJECTIVES AS WELL AS CONCEPTS, TEACHER AND PUPIL ACTIVITIES, AND VOCABULARY. PHYSICAL, MENTAL AND EMOTIONAL, AND SOCIAL CHARACTERISTICS OF JUNIOR HIGH SCHOOL STUDENTS ARE LISTED IN THE DOCUMENT AS WELL AS THE IMPLICATIONS OF THE FOREMENTIONED FACTORS FOR PROGRAM PLANNING. (FP)

VT 006 462
INDUSTRIAL ARTS TEACHERS' HANDBOOK.

ROCHESTER CITY SCHOOL DISTRICT, N.Y.
ROCHESTER CITY SCHOOL DISTRICT, 13 SOUTH FITZHUGH STREET, ROCHESTER, NEW YORK 14614 ($.90).
PUB DATE - 64 51P.

DESCRIPTORS - *INDUSTRIAL ARTS; *TEACHING GUIDES; SECONDARY GRADES; SCHOOL SAFETY; SCHOOL SHOPS; TEACHER RESPONSIBILITY; *ADMINISTRATIVE POLICY
IDENTIFIERS - *ROCHESTER CITY SCHOOL DISTRICT; NEW YORK

ABSTRACT - THIS HANDBOOK WAS DESIGNED AS A SOURCE OF INFORMATION FOR SECONDARY INDUSTRIAL ARTS TEACHERS IN LESSON PLANNING AND SHOP ORGANIZATION. IT WAS DEVELOPED BY A CURRICULUM GROUP AND TESTED OVER A 2-YEAR PERIOD. THE CONTENT OBJECTIVES ARE TO ACQUAINT TEACHERS WITH THEIR PROFESSIONAL RESPONSIBILITIES, THEIR CLASSROOM RESPONSIBILITIES, SAFETY RULES OF THE SHOP, AND ADMINISTRATIVE POLICIES AND PROCEDURES. THIS IS A PRINTED DOCUMENT WITH SAMPLES OF RECORDING FORMS, EVALUATION TESTS FOR TEACHERS AND STUDENTS, AND SAFETY CHECK LISTS. SUGGESTED SAFETY MARKERS, AND ORDER FORMS. (GR)

VT 006 597
INDUSTRIAL ARTS, DRAFTING 1. TEACHER'S GUIDE.

ROCHESTER CITY SCHOOL DISTRICT, N.Y.
PUB DATE - 65 62P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM GUIDES; SECONDARY GRADES; *DRAFTING; INSTRUCTIONAL MATERIALS; COURSE ORGANIZATION

ABSTRACT - THIS CURRICULUM GUIDE IS FOR TEACHER USE IN LESSON PLANNING FOR HIGH SCHOOL INDUSTRIAL ARTS DRAFTING. SECTIONS ARE: INTRODUCTION, SCOPE, USING THE COURSE, AND DRAWING UNITS. DRAWING UNITS ARE: (1) TWO VIEW ORTHOGRAPHIC PROJECTION, (2) THREE VIEW ORTHOGRAPHIC PROJECTION, (3) AUXILIARY VIEWS,

(4) SECTIONAL VIEWS, (5) DETAIL AND ASSEMBLY DRAWINGS, (6) PATTERN DEVELOPMENTS, AND (7) PICTORIAL DRAWINGS, (6) PATTERN DEVELOPMENTS, AND (7) PICTORIAL DRAWINGS--ISOMETRIC. EACH UNIT CONTAINS LINE DRAWINGS OF STUDENT PROJECTS AND INSTRUCTIONAL CONCEPTS TO BE LEARNED. (GR)

VT 006 598
DRAFTING I. STUDENT PROBLEMS.

ROCHESTER CITY SCHOOL DISTRICT, N.Y.
ROCHESTER CITY SCHOOL DISTRICT, 13 SOUTH FITZHUGH STREET, ROCHESTER, NEW YORK 14614 ($1.00).
PUB DATE - 65 57P.

DESCRIPTORS - *RESOURCE GUIDES; *INDUSTRIAL ARTS; STUDENT PROJECTS; SECONDARY GRADES; *DRAFTING; TRANSPARENCIES

ABSTRACT - THIS RESOURCE GUIDE IS FOR TEACHER USE IN PLANNING A COURSE FOR HIGH SCHOOL DRAFTING. THE CONTENT OBJECTIVES ARE TO DEVELOP SKILLS AND UNDERSTANDING REQUIRED IN: (1) 2-VIEW ORTHOGRAPHIC PROJECTION, (2) 3-VIEW ORTHOGRAPHIC PROJECTION, (3) AUXILIARY VIEWS, (4) SECTIONAL VIEWS, (5) DETAIL AND ASSEMBLY DRAWINGS, (6) PATTERN DEVELOPMENT, AND (7) PICTORIAL DRAWINGS - ISOMETRIC. THIS DOCUMENT IS ILLUSTRATED WITH 33 LINE DRAWINGS WHICH MAY BE REPRODUCED AS STUDENT ASSIGNMENTS OR FOR USE AS OVERHEAD TRANSPARENCIES. EACH DRAWING STATES THE PROBLEM, DIRECTIONS, AND REFERENCES USED. (GR)

VT 006 650
GENERAL METAL WORK 1 AND 2. COURSE OF STUDY.

ROCHESTER CITY SCHOOL DISTRICT, N.Y.
INDUSTRIAL ARTS DEPT.
ROCHESTER CITY SCHOOL DISTRICT, 13 SOUTH FITZHUGH STREET, ROCHESTER, NEW YORK 14614 ($1.15).
PUB DATE - 64 72P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM GUIDES; *METAL WORKING OCCUPATIONS; *METALS; SECONDARY GRADES; COURSE OBJECTIVES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; STUDENT PROJECTS
IDENTIFIERS - ROCHESTER; NEW YORK

ABSTRACT - THIS PROGRAM GUIDE IS FOR TEACHER USE IN PLANNING AND OPERATING A LOCAL METALWORKING PROGRAM CONSISTING OF TWO 18-HOUR COURSES, GENERAL METAL WORK 1, A BEGINNING COURSE, AND GENERAL METALWORK 2, AN ADVANCED COURSE. THEY WERE DEVELOPED BY AN INDUSTRIAL ARTS CURRICULUM COMMITTEE TO PROVIDE UNIFORMITY OF OFFERINGS FOR A CITY-WIDE PROGRAM. MAJOR UNITS OF GENERAL METALWORK 1 ARE: (1) ART METAL, (2) TOOL OPERATION, (3) WROUGHT IRON AND FORGING, (4) WELDING ARC AND GAS, (5) SHEET METAL, AND (6) FOUNDRY, WHILE MAJOR UNITS OF GENERAL METALWORK 2 ARE: (1) ART METAL, (2) MACHINE TOOL OPERATIONS, (3) HEAT TREATMENT, (4) WELDING, AND (5) SHEET METAL. EACH SECTION HAS BEEN DIVIDED INTO INDIVIDUAL UNITS OF INSTRUCTION WITH EACH LISTING THE THINGS THAT A STUDENT SHOULD BE ABLE TO DO, THE THINGS A STUDENT SHOULD UNDERSTAND, AND A LIST OF SUGGESTED ACTIVITIES TO BRING ABOUT THE DESIRED LEARNINGS. AT THE END OF EACH UNIT, SUGGESTED DEMONSTRATIONS AND RELATED LESSONS ARE LISTED. SUPPLEMENTAL MATERIALS INCLUDE UNITS ON HEALTH AND SAFETY, CITIZENSHIP, AVOCATIONAL PURSUITS, AND AN EXTENSIVE BIBLIOGRAPHY OF REFERENCES. (GR)

VT 006 661
AN INSTRUCTIONAL GUIDE FOR INDUSTRIAL WOODWORKING. SENIOR HIGH SCHOOL INDUSTRIAL EDUCATION.

LOS ANGELES CITY SCHOOLS, CALIF. DIV. OF INSTRUCTIONAL PLANNING AND SERVICES
SC-636
ADMINISTRATIVE SERVICES BRANCH, LOS ANGELES CITY SCHOOLS, 450 NORTH GRAND AVENUE, P.O. BOX 3307, LOS ANGELES, CALIFORNIA 90054 ($1.00).
PUB DATE - 68 120P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *WOODWORKING; *CARPENTERS; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE WAS DESIGNED FOR USE BY INDUSTRIAL EDUCATION TEACHERS OF SENIOR-HIGH SCHOOL WOODWORKING COURSES. IT WAS DEVELOPED BY LOCAL TEACHERS, SUPERVISORS, AND ADMINISTRATORS AND WAS TESTED IN CLASSROOM USE BEFORE PUBLICATION. INDUSTRIAL WOODWORKING 1 AND 2 IS A TWO SEMESTER, SINGLE PERIOD INDUSTRIAL ARTS COURSE WHILE INDUSTRIAL WOODWORKING 3, 4, 5, AND 6 ARE DOUBLE PERIOD COURSES FOCUSING ON OCCUPATIONALLY ORIENTED ACTIVITIES AND PROCESSES OF WOODWORKING. A 2-COLUMN FORMAT PRESENTS SELECTED SKILLS, PROCESSES, AND ACTIVITIES. FOR EACH OF THESE LISTS, TOPICS IN RELATED TECHNICAL INFORMATION ARE SUGGESTED. SOME OF THE MAJOR HEADINGS INCLUDED IN BOTH TYPES OF COURSES ARE: (1) PLANNING, (2) LAYOUT, (3) HOLDING DEVICES, (4) CUTTING TOOLS, (5) FASTENERS, (6) JOINERY, (7) GLUING AND CLAMPING, (8) DRIVING TOOLS, (9) HARDWARE APPLICATIONS, (10) WOODWORKING MACHINES, (11) HOME MECHANICS, (12) CABINETMAKING, (13) HOUSE CONSTRUCTION, (14) MASONRY, (15) PATTERNMAKING, (16) UPHOLSTERY, AND (17) SAFETY. SUPPLEMENTARY MATERIALS INCLUDE SAFETY RULES AND A SAMPLE SAFETY TEST. (EM)

VT 006 765
GRAPHIC ARTS 1 AND 2. COURSE OF STUDY.

ROCHESTER CITY SCHOOL DISTRICT, N.Y.
INDUSTRIAL ARTS DEPT.
ROCHESTER CITY SCHOOL DISTRICT, 13 SOUTH FITZHUGH STREET, ROCHESTER, NEW YORK 14614 ($1.30).
PUB DATE - 64 77P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM GUIDES; SECONDARY GRADES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; STUDENT PROJECTS; *GRAPHIC ARTS; *PRINTING

ABSTRACT - THIS PROGRAM GUIDE IS FOR TEACHER USE IN PLANNING AND OPERATING A GRAPHIC ARTS PROGRAM CONSISTING OF TWO 40-WEEK COURSES:

GRAPHIC ARTS 1, A BEGINNING COURSE, AND GRAPHIC ARTS 2, AN ADVANCED COURSE. THEY WERE DEVELOPED BY AN INDUSTRIAL ARTS CURRICULUM COMMITTEE TO PROVIDE UNIFORMITY OF OFFERINGS FOR A CITY-WIDE PROGRAM. MAJOR UNITS OF GRAPHIC ARTS 1 ARE: (1) INTRODUCTION, (2) LAYOUT, (3) HAND COMPOSITION, (4) RELIEF PRINTING (LETTERPRESS, LINOLEUM CUTS, RUBBER STAMP), (5) PRINTING INKS, (6) STOCKWORK, (7) BOOKBINDING, (8) SILKSCREEN, (9) PHOTOGRAPHY, (10) RELATED MATERIAL (PAPER), AND (11) VOCABULARY. MAJOR UNITS OF GRAPHIC ARTS 2 ARE: (1) INTRODUCTION, (2) HAND COMPOSITION, (3) LAYOUT, (4) COPY PREPARATION, (5) IMPOSITION, (6) PHOTOGRAPHY, (7) OFFSET PRINTING, (8) SILK SCREEN, (9) BOOKBINDING, (10) PAPER MAKING, (11) RELATED INFORMATION (MACHINE COMPOSITION, PRESSWORK, PROCESS REPORT, PRODUCT REPORT, OCCUPATIONAL REPORT), (12) VOCABULARY. EACH UNIT LISTS THE THINGS THAT A STUDENT SHOULD BE ABLE TO DO, THE THINGS HE SHOULD UNDERSTAND, AND A LIST OF SUGGESTED ACTIVITIES. SUPPLEMENTAL MATERIALS INCLUDE UNITS ON HEALTH AND SAFETY, CITIZENSHIP, AVOCATIONAL PURSUITS, A FILM LIST AND A BIBLIOGRAPHY OF REFERENCES. THE DOCUMENT IS ILLUSTRATED WITH PHOTOGRAPHS. (GR)

VT 006 976
PERFORMANCE PRE-TEST FOR STUDENTS USING THE EXPANDABLE POLYSTYRENE PLASTICS UNITL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 9P.

DESCRIPTORS - *PERFORMANCE TESTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS TEST WAS DEVELOPED FOR USE WITH A GROUP OF INSTRUCTIONAL MATERIALS DESIGNED FOR A UNIT ON EXPANDABLE POLYSTYRENE PLASTICS. THIS UNIT IS FOR USE IN SECONDARY INDUSTRIAL ARTS COURSES. THE TEST WAS DEVELOPED TO OBTAIN A MEASURE OF STUDENT PERFORMANCE PRIOR TO THE USE OF FOUR FILMS AND FOUR PROGRAMED TEXTS. IT WAS DEVELOPED IN A FEDERALLY FUNDED DEVELOPMENT PROJECT WHICH TESTED ITS MATERIALS IN NINE HIGH SCHOOLS. INSTRUCTIONS FOR CONDUCTING THE PERFORMANCE TEST ARE GIVEN IN DETAIL. RECORDS ARE KEPT BY THE TEACHER OF THE STUDENT'S PERFORMANCE. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 977-VT 006 984. (EM)

VT 006 977
KNOWLEDGE PRE-TEST; CONSTRUCTING EXPANDABLE POLYSTYRENE PLASTIC ICE BUCKET .

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 6P.

DESCRIPTORS - *TESTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS MULTIPLE CHOICE TEST OF 22 ITEMS WAS DEVELOPED FOR USE WITH A GROUP OF INSTRUCTIONAL MATERIALS DESIGNED FOR A UNIT ON EXPANDABLE POLYSTYRENE PLASTICS. THIS UNIT IS FOR USE IN SECONDARY INDUSTRIAL ARTS COURSES. THE TEST WAS DEVELOPED TO OBTAIN A MEASURE OF STUDENT KNOWLEDGE PRIOR TO THE USE OF FOUR FILMS AND FOUR PROGRAMED TEXTS. IT WAS DEVELOPED IN A FEDERALLY FUNDED DEVELOPMENT PROJECT WHICH TESTED ITS MATERIALS IN NINE HIGH SCHOOLS. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 978
PERFORMANCE CHECKLIST NO. 1; THE PRE-EXPANSION OF EXPANDABLE POLYSTYRENE BEADS .

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 11P.

DESCRIPTORS - *CHECKLISTS; *PERFORMANCE TESTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS PERFORMANCE CHECKLIST WAS DEVELOPED FOR USE WITH A GROUP OF INSTRUCTIONAL MATERIALS DESIGNED FOR A UNIT ON EXPANDABLE POLYSTYRENE PLASTICS. THE FOUR PARTS OF THE CHECKLIST COVER THE TOPICS WHICH ARE COVERED IN FOUR PROGRAMED TEXTS: (1) THE PRE-EXPANSION OF EXPANDABLE POLYSTYRENE BEADS, (2) PREPARATION AND ASSEMBLY OF MOLD, (3) MOLDING THE PRE-EXPANSION POLYSTYRENE BEADS, AND (4) REMOVING THE FOAMED PIECE. PERFORMANCE ELEMENTS ARE RATED BY THE INSTRUCTOR AS THE STUDENT MAKES A MOLDED PRODUCT OF THE BEADS. IT WAS PREPARED IN A FEDERALLY FUNDED DEVELOPMENT PROJECT WHICH TESTED ITS MATERIALS IN NINE HIGH SCHOOLS. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 979
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS. INSTRUCTION BOOK NO. 1, PRE-EXPANSION OF EXPANDABLE POLYSTYRENE BEADSL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 43P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS THE FIRST IN A SERIES OF FOUR TEXTS ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTICS. IT IS DESIGNED TO PROVIDE A REVIEW OF THE 8MM CONTINUOUS LOOP FILM, "PRE-EXPANSION OF EXPANDABLE POLYSTYRENE BEADS" WHICH IS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. THE AUTHOR DEVELOPED THIS TEXT WITHIN A FEDERALLY FUNDED DEVELOPMENT PROJECT AND TESTED IT IN INDUSTRIAL ARTS CLASSES IN NINE HIGH SCHOOLS. THE EMPHASIS OF THE CONTENT IS ON THE STUDENT LEARNING THE CORRECT PROCEDURE FOR PRE-EXPANDING RAW POLYSTYRENE BEADS IN BOILING WATER AND DRYING THEM. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 980
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS. INSTRUCTION BOOK NO. 2, PREPARATION AND ASSEMBLY OF MOLDL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 41P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS THE SECOND IN A SERIES OF FOUR TEXTS ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTICS. IT IS DESIGNED TO PROVIDE A REVIEW OF THE 8MM CONTINUOUS LOOP FILM, "PREPARATION AND ASSEMBLY OF MOLD" WHICH IS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORY, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. THE AUTHOR DEVELOPED THIS TEXT WITHIN A FEDERALLY FUNDED DEVELOPMENT PROJECT AND TESTED IT IN INDUSTRIAL ARTS CLASSES IN NINE HIGH SCHOOLS. THE EMPHASIS OF THE CONTENT IS ON THE STUDENT LEARNING HOW SUCH MOLDS ARE PREPARED. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 981
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS. INSTRUCTION BOOK NO. 3, MOLDING THE PRE-EXPANDED POLYSTYRENE BEADSL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 47P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS THE THIRD IN A SERIES OF FOUR TEXTS ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTICS. IT IS DESIGNED TO PROVIDE A REVIEW OF THE 8MM CONTINUOUS LOOP FILM, "MOLDING OF PRE-EXPANDED POLYSTYRENE BEADS" WHICH IS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. THE AUTHOR DEVELOPED THIS TEXT WITHIN A FEDERALLY FUNDED DEVELOPMENT PROJECT AND TESTED IT IN INDUSTRIAL ARTS CLASSES IN NINE HIGH SCHOOLS. THE EMPHASIS OF THE CONTENT IS ON THE STUDENT LEARNING HOW TO PREPARE MOLDS FOR PRODUCTS MADE OF POLYSTYRENE BEADS. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 982
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS. INSTRUCTION BOOK NO. 4, REMOVING THE FOAMED PIECEL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
E
PUB DATE - ND 33P

DESCRIPTORS - .*PROGRAMED TEXTS; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADE
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEAD

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS THE LAST IN A SERIES OF FOUR TESTS ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTICS. IT IS DESIGNED TO PROVIDE A REVIEW OF THE 8MM CONTINUOUS LOOP FILM, "REMOVING THE FORMED PIECE" WHICH IS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. THE AUTHOR DEVELOPED THIS TEXT WITHIN A FEDERALLY FUNDED DEVELOPMENT PROJECT AND TESTED IT IN INDUSTRIAL ARTS CLASSES IN NINE HIGH SCHOOLS. THE EMPHASIS OF THE CONTENT IS ON THE STUDENT LEARNING HOW TO PROPERLY REMOVE THE MOLDED PIECE FROM THE MOLD. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 983
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS; STUDENT GUIDEL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 17P.

DESCRIPTORS - *STUDY GUIDES; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS STUDY GUIDE IS PART OF A PROGRAMED UNIT ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTIC. IT WAS DEVELOPED BY THE AUTHOR WITHIN A FEDERALLY FUNDED DEVELOPMENT PROJECT AND TESTED IN INDUSTRIAL ARTS CLASSES IN NINE HIGH SCHOOLS. INCLUDED ARE STEP BY STEP PROCEDURES FOR THE USE OF FIVE EDUCATIONAL FILMS AND FOUR PROGRAMED TEXTS. ANSWER SHEETS WHICH ARE TO BE USED WITH THE PROGRAMED TEXTS ARE INCLUDED. OTHER RELATED DOCUMENTS ARE ED 019 512 AND VT 006 976-VT 006 984. (EM)

VT 006 984
NISH, DALE L.
EXPANDABLE POLYSTYRENE PLASTICS; TEACHER'S GUIDEL.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
PUB DATE - ND 15P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES
IDENTIFIERS - *EXPANDABLE POLYSTYRENE BEADS

ABSTRACT - THIS GUIDE IS FOR TEACHER USE WITH A UNIT ON THE MOLDING OF EXPANDABLE POLYSTYRENE PLASTIC AND IS PART OF A SERIES OF PROGRAMED MATERIALS WRITTEN TO ACCOMPANY A GROUP OF EDUCATIONAL FILMS ON THIS TOPIC. THE UNIT INVOLVES THE COMPLETION OF A MOLDED PLASTIC PRODUCT BY EACH STUDENT. IT PROVIDES BEHAVIORAL OBJECTIVES, EQUIPMENT AND FILM LISTS, AND INSTRUCTIONAL PROCEDURES. THE FOUR TOPICS IN THE UNIT ARE: (1) PRE-EXPANSION OF EXPANDABLE POLYSTYRENE BEADS, (2) PREPARATION AND ASSEMBLY OF MOLDS, (3) MOLDING THE PRE-EXPANDED POLYSTYRENE BEADS, AND (4) REMOVING THE FOAMED PIECE. CONTINUOUS LOOP 8MM FILMS

BY THESE SAME TITLES ARE AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. OTHER MATERIALS DEVELOPED BY THE AUTHOR IN A FEDERALLY FUNDED DEVELOPMENT PROJECT ARE ED 019 512 AND VT 006 976-VT 006 983. (EM)

VT 006 985
ELECTRIC ARC WELDING; KNOWLEDGE PRE-TEST.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - ND 6P.

DESCRIPTORS - *PRETESTS; *INDUSTRIAL EDUCATION; *WELDERS; *WELDING; SECONDARY GRADES

ABSTRACT - DEVELOPED BY A SYSTEM DESIGNER, ACADEMIC CONSULTANTS, TEACHERS, AND RESEARCH ASSISTANTS, AND FIELD TESTED IN NINE NORTHWEST SCHOOLS PRIOR TO REVISION AND PUBLICATION, THIS KNOWLEDGE PRETEST IS PART OF A SELF-INSTRUCTIONAL SYSTEM PRODUCED BY THE WASHINGTON STATE UNIVERSITY DEPARTMENT OF EDUCATION FOR USE IN HIGH SCHOOL INDUSTRIAL ARTS CLASSES STUDYING BEGINNING ELECTRIC WELDING. THE PURPOSE OF THE TEST IS TO DISCOVER HOW MUCH STUDENTS KNOW ABOUT ELECTRIC ARC WELDING BEFORE RECEIVING ANY WELDING INSTRUCTION IN ORDER TO LATER EVALUATE THE EFFECTIVENESS OF THE INSTRUCTIONAL SYSTEM. THE TEST IS COMPOSED OF 30 INCOMPLETE SENTENCES, EACH WITH FOUR ALTERNATIVE CHOICES FOR COMPLETION. SUPPLEMENTAL MEDIA NECESSARY IN TEACHING THE WELDING COURSE ARE EIGHT 8-MM FILMS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 W. OLIVE AVENUE, BURBANK, CALIFORNIA 91505. OTHER DOCUMENTS IN THE SERIES ARE VT 006 989, VT 006 991, VT 006 992, VT 007 011, AND VT 007 360, ALL IN THIS ISSUE. (AW)

VT 006 989
SERGEANT, HAROLD A.; NISH, DALE L.
ELECTRIC ARC WELDING; INSTRUCTION BOOK II.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - ND 110P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL EDUCATION; *WELDERS; *WELDING; SECONDARY GRADES

ABSTRACT - DEVELOPED BY A SYSTEM DESIGNER, ACADEMIC CONSULTANTS, TEACHERS, AND RESEARCH ASSISTANTS, AND FIELD TESTED IN NINE NORTHWEST SCHOOLS PRIOR TO REVISION AND PUBLICATION, THIS PROGRAMED TEST IS PART OF A SELF-INSTRUCTIONAL SYSTEM PRODUCED BY THE WASHINGTON STATE UNIVERSITY DEPARTMENT OF EDUCATION FOR USE BY HIGH SCHOOL INDUSTRIAL ARTS STUDENTS IN ELECTRIC WELDING COURSES. A CONTINUATION OF VT 007 360 (IN THIS ISSUE), THIS UNIT OF INSTRUCTION IS DESIGNED TO AID STUDENTS IN ACQUIRING ADVANCED WELDING SKILLS AND KNOWLEDGES AS WELL AS IMPROVED UNDERSTANDING OF FUNDAMENTALS OF THE ARC WELDING PROCESS. IT IS SET UP IN THE PROGRAMED FORMAT, WITH A STATEMENT OF FACT FOLLOWED BY A "COMPLETE THIS SENTENCE" EXERCISE. THIS EXERCISE FOLLOWS THE FACT IMMEDIATELY WITH NO PROVISION FOR MASKING; ANSWERS ARE GIVEN ON THE FOLLOWING PAGE. THE TEXT IS KEYED TO FOUR 8-MM FILMS AND PRACTICE EXERCISES TITLED "WELDING ESSENTIALS," "WEAVE BEADS," "FILLET WELD," AND "HORIZONTAL FILLET." THE FILMS ARE AVAILABLE FROM HOLLYWOOD VALLEY FILMS LABORATORIES, INC., 2704 W. OLIVE AVENUE, BURBANK, CALIFORNIA 91505. AN ANSWER BOOKLET MAY BE OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THIS DOCUMENT. OTHER DOCUMENTS IN THE SERIES ARE VT 006 991, VT 006 992, AND VT 007 011, ALL IN THIS ISSUE. (AW)

VT 006 992
SERGEANT, HAROLD A.
ELECTRIC ARC WELDING; INSTRUCTOR'S GUIDE.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - ND 12P.

DESCRIPTORS - *TEACHING GUIDES; INSTRUCTIONAL MEDIA; *INDUSTRIAL EDUCATION; *WELDERS; *WELDING; INSTRUCTIONAL MATERIALS; SECONDARY GRADES

ABSTRACT - THIS INSTRUCTOR'S GUIDE IS PART OF A SELF-INSTRUCTIONAL SYSTEM PRODUCED BY THE WASHINGTON STATE UNIVERSITY DEPARTMENT OF EDUCATION FOR USE IN TEACHING HIGH SCHOOL INDUSTRIAL ARTS CLASSES BEGINNING ELECTRIC ARC WELDING. IT WAS DEVELOPED BY A SYSTEM DESIGNER, CONSULTANTS, TEACHERS, AND RESEARCH ASSISTANTS, AND FIELD TESTED IN NINE NORTHWEST SCHOOLS PRIOR TO REVISION AND PUBLICATION. THE GUIDE PROVIDES: (1) GENERAL INFORMATION ON THE SYSTEM, (2) OPERATIONAL AND BEHAVIORAL OBJECTIVES, (3) VARIOUS INSTRUCTIONAL MEDIA AND METHODS, INCLUDING FILMS, INSTRUCTION BOOKS, PRACTICE SESSIONS, PRETESTS, AND EVALUATION METHODS, (4) EQUIPMENT AND MATERIALS NEEDED, AND (5) PROCEDURES FOR USING THE SYSTEM. OTHER DOCUMENTS IN THE SERIES ARE VT 006 985, VT 006 989, VT 006 991, VT 007 011, AND VT 007 360, ALL IN THIS ISSUE. (AW)

VT 006 998
HILL, EDWIN K., AND OTHERS
BASIC ELECTRICITY; STUDENT WORKBOOK, INSTRUCTORS GUIDE AND TESTS.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - ND 21P.

DESCRIPTORS - *AUTOINSTRUCTIONAL AIDS; *ELECTRICITY; *POST TESTING; PRETESTING; WORKBOOKS; TEACHING GUIDES; ACHIEVEMENT TESTS; UNITS OF STUDY (SUBJECT FIELDS); *INDUSTRIAL EDUCATION; ELECTRICAL OCCUPATIONS; *EXPERIMENTAL CURRICULUM

ABSTRACT - THIS SELF-INSTRUCTIONAL UNIT IN BASIC ELECTRICITY IS DESIGNED TO TEACH BASIC KNOWLEDGES BY INVOLVING SENSES OF SIGHT,

HEARING, AND TOUCH IN THE LEARNING PROCESS. RELATED LABORATORY EXERCISES CONSIST OF A SERIES OF TAPE-SLIDE SEQUENCES IN A LINEAR PROGRAMED PATTERN AND A WORKBOOK IN WHICH STUDENTS RESPOND TC THE QUESTIONS AND PROBLEMS. A PRETEST AND TWO POST-TESTS, ANC AN INSTRUCTORS GUIDE ARE INCLUDED. THE FINAL REPORT OF THE POLYSENSORY SELF-INSTRUCTIONAL SYSTEM IS AVAILABLE AS ED 021 141 OR VT 005 941 (ARM SPRING 1969). (GR)

VT 007 001
SERGEANT, HAROLD A.
OXY-ACETYLENE WELDING SERIES; INSTRUCTOION BOOK 2 .

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505 (FILMS).
PUB DATE - 68 123P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL ARTS; *WELDING; HIGH SCHOOLS; ILLUSTRATIONS; SINGLE CONCEPT FILMS; PROGRAMED INSTRUCTION

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS FOR USE BY INDUSTRIAL ARTS STUDENTS IN HIGH SCHOOL COURSES. IT WAS DEVELOPED BY THE AUTHOR AND WAS FIELD TESTED IN NINE HIGH SCHOOLS WITH LATER REVISION. ITS CONTENTS COVER MAKING HEADS WITH AND WITHOUT FILLER RODS AND MAKING CORNER JOINT WELDS. THE CONTINUOUS LOOP 8MM FILMS, "BEADS WITHOUT FILLER ROD," "BEADS WITH FILLER RODS," AND "CORNER JOINT WELD" ARE AVAILABLE FROM HOLLYWOOD VALLEY FILM LABCRATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. AN ANSWER BOOKLET MAY BE OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THE DOCUMENT. A COMPANION TEXT (PART 1) IS VT 007 002 (AIM, SPRING, 1969). (EM)

VT 007 002
SERGEANT, HAROLD A.
OXY-ACETYLENE WELDING SERIES; INSTRUCTION BOOK 1 .

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505 (FILMS).
PUB DATE - 68 133P.

DESCRIPTORS - *PRCGRAMED TEXTS; *INDUSTRIAL ARTS; *WELDING; HIGH SCHOOLS; ILLUSTRATIONS; SINGLE CONCEPT FILMS; PROGRAMED INSTRUCTION

ABSTRACT - THIS SCRAMBLED, PROGRAMED TEXT IS FOR USE BY INDUSTRIAL ARTS STUDENTS IN HIGH SCHOOL COURSES. IT WAS DEVELOPED BY THE AUTHOR AND WAS FIELD TESTED IN NINE HIGH SCHOOLS WITH LATER REVISICN. THE CONTENTS COVER THE SAFE USE OF OXYACETYLENE WELDING EQUIPMENT ANC LIGHTING ANC ADJUSTING THE FLAME. THE CONTINUOUS LOOP 8MM FILMS, "EQUIPMENT AND SAFETY" AND "LIGHTING AND ADJUSTING FLAME" ARE AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORY, INC., 2704 WEST OLIVE AVENUE, BURBANK, CALIFORNIA 91505. AN ANSWER BOOK MAY BE OBTAINED FROM THE SOURCE OF AVAILABILITY INDICATED FOR THE DOCUMENT. A COMPANION TEXT (PART 2) IS VT 007 001 (AIM, SPRING, 1969). (EM)

VT 007 011
ELECTRIC ARC WELDING; STUDENT PERFORMANCE PRE-TEST.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - ND 8P.

DESCRIPTORS - *PRETESTS; *INDUSTRIAL EDUCATION; *WELDERS; *WELDING; SECONDARY GRADES

ABSTRACT - DEVELOPED BY A SYSTEM DESIGNER, ACADEMIC CONSULTANTS, TEACHERS, AND RESEARCH ASSISTANTS, AND FIELD TESTED IN NINE NORTHWEST SCHOOLS PRIOR TO REVISION AND PUBLICATION, THIS STUDENT PERFORMANCE PRE-TEST IS PART OF A SELF-INSTRUCTIONAL SYSTEM PRODUCED BY THE WASHINGTON STATE UNIVERSITY DEPARTMENT OF EDUCATION FOR USE IN HIGH SCHOOL INDUSTRIAL ARTS CLASSES STUDYING BEGINNING ELECTRIC WELDING. THE PURPOSE OF THE TEST IS TO DETERMINE, PRIOR TO TRAINING, THE STUDENT'S CAPABILITY TO SELECT AND USE THE MATERIALS AND EQUIPMENT INVOLVED IN THE ELECTRIC WELDING COURSE. THE TEST FORMAT CONSISTS OF QUESTIONS AND INSTRUCTIONS TO BE GIVEN BY THE TEACHER, WITH THE APPROPRIATE STUDENT RESPONSES ALSO GIVEN. A LIST OF NECESSARY EQUIPMENT AND SUPPLIES IS PROVIDED. SUPPLEMENTARY MEDIA NECESSARY IN TEACHING WELDING COURSE ARE EIGHT 8-MM FILMS AVAILABLE FROM HOLLYWOOD VALLEY FILM LABORATORIES, INC., 2704 W. OLIVE AVENUE, BURBANK, CALIFORNIA 91505. OTHER DOCUMENTS IN THE SERIES ARE VT 006 985, VT 006 989, VT 006 991, VT 006 992, AND VT 007 360, ALL IN THIS ISSUE. (AW)

VT 007 263
SMITH, REX M.
INDUSTRIAL ARTS IN THE JUNIOR HIGH SCHOOL . A GUIDE FOR SCHOOL ADMINISTRATORS AND TEACHERS.

WEST VIRGINIA STATE DEPT. OF EDUCATION, CHARLESTON
PUB DATE - APR68 79P.

DESCRIPTORS - *PROGRAM GUIDES; CURRICULUM GUIDES; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; RESOURCE MATERIALS; EDUCATIONAL FACILITIES; EDUCATIONAL EQUIPMENT

ABSTRACT - THIS PROGRAM GUIDE WAS PREPARED AT THE REQUEST OF THE WEST VIRGINIA BOARD OF EDUCATION UNDER THE DIRECTION OF A COMMITTEE COMPOSED OF THE STATE SUPERVISOR OF INDUSTRIAL ARTS AND COLLEGE DEPARTMENT CHAIRMEN. IT IS FOR USE BY SCHOOL ADMINISTRATORS AND INDUSTRIAL ARTS TEACHERS CONCERNED WITH JUNIOR HIGH PROGRAMS. MAJOR SECTIONS ARE TITLED: (1) A COMPREHENSIVE PROGRAM OF INDUSTRIAL ARTS FOR THE JUNIOR HIGH SCHOOL, (2) OPERATIONAL POLICY, (3) RECOMMENDED STANDARDS FOR INDUSTRIAL ARTS FACILITIES, (4) NATIONAL DEFENSE EDUCATION

TITLE III, (5) MATERIAL FOR THE RESOURCE CENTER, (6) INVENTORY AND SERVICE INDEX, AND (7) SUGGESTED LISTING OF TOOLS AND EQUIPMENT. (EM)

VT 007 308
STUNARD, E. ARTHUR; HARNACK, RICHARD B.
EQUIPMENT, TOOLS AND MATERIALS, AS PROPOSED BY THE TECHNOLOGY FOR CHILDREN PROJECT.

NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF VOCATIONAL EDUCATION
FORD FOUNDATION, NEW YORK, N.Y.
TECHNOLOGY FOR CHILDREN PROJECT, DIVISION OF VOCATIONAL EDUCATION, NEW JERSEY STATE DEPARTMENT OF EDUCATION, 225 WEST STATE STREET, TRENTON, NEW JERSEY 08625.
PUB DATE - JUN68 40P.

DESCRIPTORS - *INDUSTRIAL ARTS; *ELEMENTARY GRADES; *CLASSROOM FURNITURE; EDUCATIONAL INNOVATION; INSTITUTES (TRAINING PROGRAMS); *PREVOCATIONAL EDUCATION; *EDUCATIONAL EQUIPMENT; INSTRUCTIONAL MATERIALS; CURRICULUM DEVELOPMENT
IDENTIFIERS - *TECHNOLOGY FOR CHILDREN PROJECT

ABSTRACT - THE TECHNOLOGY FOR CHILDREN PROJECT IS DEVISING A CLASSROOM ENVIRONMENT WHICH ENCOURAGES A CHILD'S EXPLORATORY AND MANIPULATIVE DRIVES BY INCLUDING A VARIETY OF MATERIALS AND TOOLS IN THE CLASSROOM. THIS GUIDE LISTS THE EQUIPMENT, TOOLS, AND MATERIALS RECOMMENDED FOR USE BY ELEMENTARY SCHOOL CHILDREN. INCLUDED ARE: (1) A RECOMMENDED TOOL LIST FOR AN ELEMENTARY CLASSROOM; (2) PICTURES, BILLS OF MATERIALS AND WORKING DRAWINGS OF A PORTABLE TOOL PANEL, WORKBENCH, FOLDING WORK SURFACE, AND A SAW HORSE; AND (3) MATERIAL DESCRIPTION AND LISTING. A DESCRIPTION IS INCLUDED OF THE SUMMER INSTITUTES WHICH HAVE BEEN CONDUCTED IN NEW JERSEY TO IMPLEMENT AND TEST THE THEORY OF THE TECHNOLOGY FOR CHILDREN PROJECT. (GR)

VT 007 334
JAHNKE, L.P.
FABRICATION TECHNIQUES FOR TURBINE COMPONENTS.

GENERAL ELECTRIC CO., CINCINNATI, OHIO. FLIGHT PROPULSION DIV.
PUB DATE - 66 28P.PAPER PRESENTED AT ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT PROPULSION AND ENERGETICS MEETING (27TH, PARIS, APRIL 4-7, 1966).

DESCRIPTORS - *RESOURCE MATERIALS; *INDUSTRIAL ARTS; *PRODUCTION TECHNIQUES; *WELDING; METALS; *AEROSPACE TECHNOLOGY

ABSTRACT - BRIEF DESCRIPTIONS ARE PROVIDED FOR 10 FABRICATING TECHNIQUES WHICH ARE CURRENTLY USED TO PRODUCE JET ENGINE COMPONENTS. THESE TECHNIQUES ARE: (1) ELECTROFORMING, (2) POWDER METAL SLIP CASTING, (3) PRECISION VACUUM CASTING, (4) CHEMICAL MILLING, (5) ELECTRO-CHEMICAL MACHINING, (6) ROLL FORMING, (7) FLAME AND PLASMA SPRAYING, (8) HIGH TEMPERATURE BRAZING, (9) PROGRAMED INERT GAS MULTI-ELECTRODE WELDING, AND (10) ELECTRON BEAM WELDING. FORTY PHOTOGRAPHS ILLUSTRATE THESE TECHNIQUES. (EM)

VT 007 360
SERGEANT, HAROLD A.
ELECTRIC ARC WELDING. INSTRUCTION BOOK.

WASHINGTON STATE UNIV., PULLMAN. DEPT. OF EDUCATION
NORTHWEST REGIONAL EDUCATIONAL LAB., PORTLAND, OREG.
PUB DATE - ND 123P.

DESCRIPTORS - *PROGRAMED TEXTS; *INDUSTRIAL EDUCATION; *WELDERS; *WELDING; SECONDARY GRADES

ABSTRACT - DEVELOPED BY A SYSTEMS DESIGNER WITH ACADEMIC CONSULTANTS, TEACHERS, AND RESEARCH ASSISTANTS AND FIELD TESTED IN NINE NORTHWEST SCHOOLS PRIOR TO REVISION AND PUBLICATION, THIS PROGRAMED TEXT IS PART OF A SELF-INSTRUCTIONAL SYSTEM PRODUCED BY THE WASHINGTON STATE UNIVERSITY DEPARTMENT OF EDUCATION FOR USE BY HIGH SCHOOL INDUSTRIAL ARTS STUDENTS IN BEGINNING ELECTRIC WELDING COURSES. THE PROGRAM'S FORMAT INCLUDED A STATEMENT OF FACT FOLLOWED BY A "COMPLETE THE SENTENCE" EXERCISE. THE EXERCISE FOLLOWS THE FACT IMMEDIATELY WITH NO PROVISION FOR MASKING; ANSWERS ARE GIVEN ON THE FOLLOWING PAGE. THE TEXT IS KEYED TO FOUR 8-MM FILMS AND PRACTICE EXERCISES DEALING WITH SAFETY AND THE PROCESSES OF RUNNING A BEAD, STRIKING AN ARC, AND MAKING A FILLET WELD. THE FILMS, TITLED "EQUIPMENT AND SAFETY," "RUNNING A BEAD," "STRIKING AN ARC," AND "FILLET WELD," ARE AVAILABLE FROM HOLLYWOOD FILM LABORATORIES, INC., 2704 W. OLIVE AVENUE, BURBANK, CALIFORNIA 91505. OTHER DOCUMENTS IN THE SERIES ARE VT 006 985, VT 006 989, VT 006 991, VT 006 992, AND VT 007 011, ALL IN THIS ISSUE. (AW)

VT 007 363
WARFIELD, C.H.
TEACHING AIDS IN ELECTRICITY. WORK SHOP.

AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS, FOND DU LAC, WIS.
AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS, 537 SOUTH MAIN STREET, FOND DU LAC, WISCONSIN 54935 ($1.15).
PUB DATE - ND 38P.

DESCRIPTORS - *INSTRUCTIONAL MATERIALS; INDUSTRIAL ARTS; *ELECTRICITY; *EDUCATIONAL EXPERIMENTS; LABORATORY EXPERIMENTS; *DEMONSTRATIONS (EDUCATIONAL); LABORATORY PROCEDURES; MAGNETS; ELECTRIC CIRCUITS

ABSTRACT - THIS RESOURCE UNIT IS FOR TEACHER USE IN PLANNING AND CONDUCTING COMMON EXPERIMENTS AND DEMONSTRATIONS OF ELECTRICITY TO ENABLE STUDENTS TO BETTER UNDERSTAND SOME OF THE FUNDAMENTALS OF ELECTRICITY. THE EXPERIMENTS HAVE BEEN TAKEN FROM STANDARD TREATICES ON ELECTRICITY, AND A LIST OF APPARATUS NEEDED, WHERE IT CAN BE OBTAINED, AND, IN SOME CASES, APPROXIMATE COSTS ARE INCLUDED FOR EACH EXPERIMENT. THE DOCUMENT IS ILLUSTRATED WITH LINE DRAWINGS. A LIST OF

REFERENCES IS APPENDED. (GR)

VT 007 384
HEDGES, CHARLES S.; WOMACK, R.C.
FLUID POWER IN PLANT AND FIELD. VOLUME 1.

WOMACK MACHINE SUPPLY CO., DALLAS, TEX.
WOMACK MACHINE SUPPLY COMPANY, P.O. BOX 35027, DALLAS, TEXAS 75235 ($5.85).
PUB DATE - 68 174P.

DESCRIPTORS - *SUPPLEMENTARY TEXTBOOKS; *TRADE AND INDUSTRIAL EDUCATION; *FLUID POWER EDUCATION; *FLUID POWER; EQUIPMENT MAINTENANCE; EQUIPMENT UTILIZATION; *KINETICS; SECONDARY EDUCATION; ADULT VOCATIONAL EDUCATION

ABSTRACT - THIS SUPPLEMENTARY TEXT IS FOR STUDENT OR TEACHER USE IN INDUSTRIAL OR VOCATIONAL CLASSES. IT CONTAINS TIPS, SUGGESTIONS, AND IDEAS FOR IMPROVING FLUID POWER EQUIPMENT PERFORMANCE, PREVENTING PREMATURE FAILURES, AND CORRECTING MALFUNCTIONS OR BREAKDOWNS. CHAPTER HEADINGS ARE: (1) AIR AND HYDRAULIC CYLINDERS, (2) AIR AND HYDRAULIC VALVES, (3) HYDRAULIC PUMPS AND MOTORS, (4) HYDRAULIC OIL RESERVOIRS, (5) ACCUMULATORS, (6) HEAT EXCHANGERS FOR OIL COOLING, (7) AIR LINE FILTERS, REGULATORS, AND LUBRICATORS, (8) DRYERS FOR COMPRESSED AIR, AND (9) VACUUM PUMPS, VALVES, AND CYLINDERS. NUMEROUS LINE DRAWINGS ARE PROVIDED IN EACH CHAPTER AND NINE CHARTS AND TABLES PROVIDE REFERENCE DATA. VOLUME 2 IS IN PROGRESS. RELATED DOCUMENTS ARE VT 007 439-VT 007 441 (BOTH IN THIS ISSUE). (EM)

VT 007 388
HARNACK, RICHARD B.
TECHNOLOGY FOR CHILDREN PROJECT. RECOMMENDED PROCEDURES FOR SAFETY AND USE OF HAND TOOLS IN THE ELEMENTARY CLASSROOM .

NEW JERSEY DEPT. OF EDUCATION, TRENTON. DIV. OF VOCATIONAL EDUCATION
PUB DATE - ND 17P.

DESCRIPTORS - *GUIDELINES; *SCHOOL SAFETY; *INDUSTRIAL ARTS; *ELEMENTARY GRADES; *HAND TOOLS; SAFETY EDUCATION; ACCIDENT PREVENTION
IDENTIFIERS - *PROJECT TECHNOLOGY FOR CHILDREN

ABSTRACT - THIS MANUAL WAS DEVELOPED FOR USE BY TEACHERS IN THE TECHNOLOGY FOR CHILDREN PROJECT. IT WAS PREPARED BY THE AUTHOR AND IS CONSIDERED TO BE A GUIDE TO THE SAFE USE OF EQUIPMENT AND MATERIALS IN AN ELEMENTARY EDUCATION ACTIVITY PROGRAM FOCUSING ON INDUSTRIAL OR TECHNOLOGICAL EQUIPMENT, PROCESSES, AND MATERIALS. IT PROVIDES GUIDELINES RELATIVE TO GENERAL SAFETY AND SAFE USE OF HAND TOOLS, POWER TOOLS, MATERIALS, AND ELECTRICITY. (EM)

VT 007 439
HEDGES, CHARLES S.
INDUSTRIAL FLUID POWER. VOLUME 1.

WOMACK MACHINE SUPPLY CO., DALLAS, TEX.
WOMACK MACHINE SUPPLY COMPANY, P.O. BOX 35027, DALLAS, TEXAS 75235 ($5.95).
PUB DATE - 65 184P.

DESCRIPTORS - *TEXTBOOKS; *INDUSTRIAL EDUCATION; *FLUID POWER; SECONDARY GRADES; ADULT VOCATIONAL EDUCATION

ABSTRACT - THIS TEXT, WRITTEN BY AN ENGINEER AND A TECHNICAL STAFF, IS FIRST IN A SERIES OF THREE FOR STUDENT AND TEACHER USE IN INDUSTRIAL ARTS, VOCATIONAL, OR ADULT COURSES TREATING FLUID POWER. PRINCIPLES OF FLUID POWER TRANSMISSION AND THE COMMON COMPONENTS SUCH AS PUMPS, VALVES, AND CYLINDERS ARE TREATED. CHAPTERS, EACH ILLUSTRATED WITH NUMEROUS LINE DRAWINGS, ARE: (1) FUNDAMENTALS OF FLUID POWER, (2) CYLINDERS, (3) 2 AND 3-WAY VALVES, (4) 4 AND 5-WAY VALVES, (5) PUMPS, AND (6) ACCESSORIES. SUPPLEMENTARY MATERIALS INCLUDE A GLOSSARY, 120 REVIEW QUESTIONS AND ANSWERS, AND USA STANDARDS INSTITUTE SYMBOLS. A SET OF COLOR SLIDES BASED ON THE TEXT'S ILLUSTRATIONS IS AVAILABLE FROM THE PUBLISHER. VOLUME 2 AND 3 OF THIS SERIES ARE AVAILABLE AS VT 007 440 AND VT 007 441, RESPECTIVELY, AND A RELATED DOCUMENT, "FLUID POWER IN PLANT AND FIELD, VOLUME 1," IS AVAILABLE AS VT 007 384, ALL IN THIS ISSUE. (EM)

VT 007 440
HEDGES, CHARLES S.
INDUSTRIAL FLUID POWER. VOLUME 2.

WOMACK MACHINE SUPPLY CO., DALLAS, TEX.
WOMACK MACHINE SUPPLY COMPANY, P.O. BOX 35027, DALLAS, TEXAS 75235 ($5.25).
PUB DATE - 66 144P.

DESCRIPTORS - *TEXTBOOKS; *INDUSTRIAL EDUCATION; *FLUID POWER; SECONDARY GRADES; ADULT VOCATIONAL EDUCATION

ABSTRACT - THIS TEXT, WRITTEN BY AN ENGINEER AND A TECHNICAL STAFF, IS THE SECOND IN A SERIES OF THREE FOR STUDENT AND TEACHER USE IN INDUSTRIAL ARTS, VOCATIONAL OR ADULT COURSES TREATING FLUID POWER. THE USE AND CONTROL OF AIR AND HYDRAULIC CYLINDERS ARE COVERED IN THESE CHAPTERS: (1) APPLICATION IDEAS FOR CYLINDERS, (2) BASIC AIR CIRCUITS, (3) BASIC HYDRAULIC CIRCUITS, AND (4) COMBINATION AID/OIL CIRCUITS. EACH CHAPTER HAS NUMEROUS LINE DRAWINGS, AND A SET OF COLOR SLIDES BASED ON THESE ILLUSTRATIONS IS AVAILABLE. SUPPLEMENTARY MATERIALS INCLUDE TABLES OF CYLINDER SPEED AND FORCE AND USA STANDARDS INSTITUTE SYMBOLS. VOLUME 1 AND 3 OF THIS SERIES ARE AVAILABLE AS VT 007 439 AND VT 007 441, RESPECTIVELY, AND A RELATED DOCUMENT,"FLUID POWER IN PLANT AND FIELD, VOLUME 1," IS AVAILABLE AS VT 007 384, ALL IN THIS ISSUE. (EM)

VT 007 441
HEDGES, CHARLES S.
INDUSTRIAL FLUID POWER. VOLUME 3.

WOMACK MACHINE SUPPLY CO., DALLAS, TEX.
WOMACK MACHINE SUPPLY COMPANY, P.O. BOX 35027, DALLAS, TEXAS 57235 ($5.90).
PUB DATE - 68 170P.

DESCRIPTORS - *TEXTBOOKS; *INDUSTRIAL EDUCATION; *FLUID POWER; SECONDARY GRADES; ADULT VOCATIONAL EDUCATION

ABSTRACT - THIS TEXT, WRITTEN BY AN ENGINEER AND A TECHNICAL STAFF, IS THE LAST IN A SERIES OF THREE FOR STUDENT AND TEACHER USE IN INDUSTRIAL ARTS, VOCATIONAL, OR ADULT COURSES TREATING FLUID POWER. CHAPTERS, ILLUSTRATED WITH NUMEROUS LINE DRAWINGS AND CONTAINING REVIEW QUESTIONS, ARE: (1) INTRODUCTION TO FLUID MOTORS, (2) REVIEW OF THRUST, TORQUE, AND POWER, (3) SELECTION OF HYDRAULIC MOTORS, (4) ELECTRIC AND HYDRAULIC MOTORS COMPARED, (5) DIRECTIONAL CONTROL OF HYDRAULIC MOTORS, (6) SPEED CONTROL OF HYDRAULIC MOTORS, (7) CLOSED LOOP HYDRAULIC SYSTEMS, (8) INSTALLATION OF HYDRAULIC MOTORS, (9) AIR MOTORS, (10) ROTARY ACTUATORS, AND (11) PRESSURE INTENSIFIERS. SUPPLEMENTARY MATERIALS INCLUDE CONVERSION TABLES FOR UNITS OF MEASURE, PIPE CAPACITY, AND USA STANDARDS INSTITUTE SYMBOLS. VOLUME 1 AND 2 OF THIS SERIES ARE AVAILABLE AS VT 007 439, AND VT 007 440, RESPECTIVELY, AND A RELATED DOCUMENT, "FLUID POWER IN PLANT AND FIELD, VOLUME 1," IS AVAILABLE AS VT 007 384, ALL IN THIS ISSUE. A TEACHER'S MANUAL NOW BEING PREPARED FOR THIS TEXT MAY BE OBTAINED FROM THE ABOVE ADDRESS FOR $1.50. (EM)

VT 007 459 ED 024 822
HOOTS, WILLIAM R.
THE DEVELOPMENT OF A COURSE OF STUDY FOR INDUSTRIAL ARTS EDUCATION AT THE ELEMENTARY SCHOOL LEVEL . RESEARCH REPORT.

OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
OEG-3-8-080023-0019 24
BR-8-C-023
PUB DATE - AUG68 111P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; TEXTBOOK CONTENT; CONTENT ANALYSIS; *CURRICULUM DEVELOPMENT; ELEMENTARY GRADES; BIBLIOGRAPHIES; *ELEMENTARY SCHOOL CURRICULUM IDENTIFIERS - NORTH CAROLINA

ABSTRACT - THE DEVELOPMENT OF A COURSE OF STUDY FOR INDUSTRIAL ARTS IN GRADES ONE THROUGH EIGHT, WHICH WAS BASED ON MATERIAL PRESENTED ON STATE ADOPTED BASAL TEXTBOOKS, WAS THE PURPOSE OF THIS PROJECT. INSTRUCTION RESULTING FROM THE COURSE OF STUDY WAS TO SERVE SIX FUNCTIONS: SOCIAL, CULTURAL, CONSUMER, RECREATIONAL, OCCUPATIONAL, AND TECHNICAL. SPECIFIC PROJECT OBJECTIVES WERE TO EXTRACT AND ORGANIZE MATERIAL FROM THE TEXTS AND TO DEVELOP A COURSE OF STUDY KEYED TO TEXTS AND SUGGESTED REFERENCE MATERIALS. TOPICS KEYED TO THESE BOOKS WERE ORGANIZED UNDER SIX HEADINGS FOR EACH GRADE: (1) COMMUNICATION, (2) CONSTRUCTION, (3) MANUFACTURING, (4) TRANSPORTATION, (5) POWER, AND (6) SERVICE. FOLLOWING THIS A COURSE OUTLINE WAS DEVELOPED FOR EACH GRADE FROM THESE TOPICS, IF THEY MET FIVE STATED CRITERIA. THE OUTLINES INCLUDE TEXT AND REFERENCE KEYS AND SUGGESTED ACTIVITIES FOR EACH TOPIC. THE BIBLIOGRAPHY LISTS 84 TEXTBOOKS AND 48 SUPPLEMENTARY REFERENCES. (EM)

VT 007 464
INDUSTRIAL ARTS ENRICHMENT EXPERIENCES IN THE ELEMENTARY SCHOOL. GRADES FIVE AND SIX. CURRICULUM BULLETIN 173.

KANSAS CITY PUBLIC SCHOOLS, MO.
BUSINESS SERVICES DIVISION, 601 BOARD OF EDUCATION BUILDING, 1211 MCGEE, KANSAS CITY, MISSOURI 64106 ($2.00).
PUB DATE - JAN68 149P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *CURRICULUM ENRICHMENT; SCIENCES; MATHEMATICS; SOCIAL STUDIES; ART; HEALTH; GRADE 5; GRADE 6; INSTRUCTIONAL AIDS; STUDENT PROJECTS

ABSTRACT - DEVELOPED AS A 160-HOUR COURSE BY A CURRICULUM DIRECTOR AND A COMMITTEE OF TEACHERS AND CONSULTANTS, THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS AND ELEMENTARY TEACHERS IN GRADES 5 AND 6. THE MAJOR UNITS ARE: (1) SCIENCE AND THE INDUSTRIAL ARTS, (2) ELEMENTARY MATHEMATICS AND THE INDUSTRIAL ARTS, (3) SOCIAL STUDIES AND THE INDUSTRIAL ARTS, (4) ART AND THE INDUSTRIAL ARTS, AND (5) HEALTH AND THE INDUSTRIAL ARTS. EACH UNIT INCLUDES OBJECTIVES, SUGGESTED PROJECTS, REQUIRED MATERIALS, AND A CONTENT OUTLINE. SUPPLEMENTARY MATERIALS INCLUDE LISTS OF TEACHING AIDS, TOOLS, MATERIALS, AND REFERENCES. THE DOCUMENT IS ILLUSTRATED WITH PHOTOGRAPHS AND LINE DRAWINGS. (EM)

VT 007 685 ED 028 259
ARIZONA INDUSTRIAL ARTS: ELECTRICITY ELECTRONICS. A CURRICULUM GUIDE FOR INTERMEDIATE AND SECONDARY LEVEL PROGRAMS.

ARIZONA STATE DEPT. OF PUBLIC INSTRUCTION, PHOENIX. DEPT. OF VOCATIONAL EDUCATION
PUB DATE - 67 55P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *ELECTRICITY; *ELECTRONICS; SECONDARY GRADES; INTERMEDIATE GRADES; INSTRUCTIONAL AIDS

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY TEACHERS AND ITS PURPOSES ARE: (1) TO DESCRIBE THE PURPOSE AND CONTENT OF ELECTRICITY-ELECTRONICS COURSES, (2) TO PROVIDE A SUGGESTED COURSE OUTLINE WITH STUDENT AND TEACHER ACTIVITIES AND INSTRUCTIONAL AIDS, (3) TO PROMOTE COORDINATION BETWEEN INTERMEDIATE AND SECONDARY PROGRAMS IN ARIZONA, AND (4) TO SUGGEST A FOUNDATION CURRICULUM FOR TRADE AND INDUSTRIAL EDUCATION, TECHNICAL EDUCATION, AND ENGINEERING. IT WAS DEVELOPED BY A LARGE GROUP OF TEACHERS IN A SERIES OF MEETINGS WHICH WAS COORDINATED BY THE STATE SUPERVISORS. "EXPLORING ELECTRICITY-ELECTRONICS" IS A 45-HOUR UNIT AND "GENERAL ELECTRICITY-ELECTRONICS," "ELECTRONICS," AND "ADVANCED ELECTRONICS" ARE 180-HOUR COURSES. FOR EACH OF THESE OBJECTIVES ARE GIVEN, AND COURSE CONTENT, STUDENT ACTIVITIES, TEACHER ACTIVITIES, AND INSTRUCTIONAL AIDS ARE ORGANIZED IN PARALLEL COLUMNS FOR EACH TOPIC. SUPPLEMENTARY MATERIALS INCLUDE SAFETY RULES, VISUAL AID BIBLIOGRAPHY, AND A REFERENCE BIBLIOGRAPHY. (EM)

VT 007 689
INDUSTRIAL ARTS; ELECTRICITY-ELECTRONICS.

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKE CITY, UTAH 84111 ($1.00).
PUB DATE - 66 67P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *ELECTRICITY; *ELECTRONICS; SECONDARY GRADES; INSTRUCTIONAL AIDS; EDUCATIONAL EQUIPMENT; UNITS OF STUDY (SUBJECT FIELDS)
IDENTIFIERS - UTAH

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF SEVERAL DEVELOPED TO PROVIDE ADMINISTRATORS AND INDUSTRIAL ARTS TEACHERS WITH THE STATE-ADOPTED CURRICULUM FOR ELECTRICITY-ELECTRONICS. IT WAS PREPARED BY A COMMITTEE UNDER THE DIRECTION OF A STATE SUPERVISOR. COURSE OUTLINES ARE GIVEN FOR A 9-WEEK AND AN 18-WEEK JUNIOR-HIGH COURSE AND FOR THREE 36-WEEK SENIOR-HIGH COURSES. INCLUDED FOR EACH COURSE ARE GENERAL OBJECTIVES, TOPICAL OUTLINES, TIME ALLOTMENTS, AND INSTRUCTIONAL AIDS AND ACTIVITIES. LISTS OF FILMS, BOOKS, AND EQUIPMENT ARE GIVEN. (EM)

VT 007 730
INDUSTRIAL ARTS; A STUDY OF INDUSTRIAL TECHNOLOGY. INTERIM BULLETIN.

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE
PUB DATE - AUG68 67P.

DESCRIPTORS - *PROGRAM GUIDES; *CURRICULUM GUIDES; *INDUSTRIAL ARTS; ELEMENTARY GRADES; SECONDARY GRADES
IDENTIFIERS - FLORIDA

ABSTRACT - ORGANIZED AROUND INDUSTRIAL AND TECHNOLOGICAL CONCEPTS OF COMMUNICATION, CONSTRUCTION, MANUFACTURING, AND POWER, THIS PROGRAM GUIDE, DEVELOPED BY SUPERVISORS AND TEACHER EDUCATORS, IS FOR ADMINISTRATORS, SUPERVISORS, TEACHER EDUCATORS, AND TEACHERS. IT PROVIDES AN OVERVIEW OF INDUSTRIAL ARTS FOR GRADES K-12 ORGANIZED AT THREE LEVELS: LOWER GRADES, MIDDLE GRADES, AND UPPER GRADES. MAJOR SECTIONS FOR EACH LEVEL ARE: (1) PHILOSOPHY, (2) GOALS, (3) BEHAVIORAL OBJECTIVES, (4) THE PROGRAM, (5) FACILITIES, (6) SUGGESTED COURSES, AND (7) IMPLEMENTATION. (EM)

VT 007 779
BEGINNING LEATHERCRAFT PROJECTS FOR THE INDUSTRIAL ARTS.

DENVER PUBLIC SCHOOLS, COLO. DEPT. OF GENERAL CURRICULUM SERVICES
DENVER PUBLIC SCHOOLS, ROOM 307, 414 14TH STREET, DENVER, COLORADO 80202($1.25).
PUB DATE - 65 81P.

DESCRIPTORS - *SUPPLEMENTARY TEXTBOOKS; *INDUSTRIAL ARTS; *HANDICRAFTS; *STUDENT PROJECTS; *LEATHER

ABSTRACT - THIS PROJECT BOOK IS FOR STUDENT AND TEACHER USE IN INDUSTRIAL ARTS CRAFTS COURSES. IT WAS DEVELOPED BY A COMMITTEE OF TEACHERS. ILLUSTRATIONS, PLANS, MATERIAL LISTS, PROCEDURAL LISTS, AND REFERENCES ARE GIVEN FOR 30 SIMPLE LEATHER PROJECTS. LINE DRAWINGS AND PHOTOGRAPHS ILLUSTRATE THE TEXT. A SIMILAR PUBLICATION FOR INTERMEDIATES WHICH CONTAINS 35 MORE DIFFICULT PROJECTS IS AVAILABLE AS VT 007 780. (EM)

VT 007 780
INTERMEDIATE LEATHERCRAFT PROJECTS FOR THE INDUSTRIAL ARTS.

DENVER PUBLIC SCHOOLS, COLO. DEPT. OF GENERAL CURRICULUM SERVICES
DENVER PUBLIC SCHOOLS, ROOM 307, 414 14TH STREET, DENVER, COLORADO 80202 ($1.50).
PUB DATE - 65 115P.

DESCRIPTORS - *SUPPLEMENTARY TEXTBOOKS; *INDUSTRIAL ARTS; *LEATHER; *HANDICRAFTS; *STUDENT PROJECTS

ABSTRACT - THIS PROJECT BOOK IS FOR STUDENT AND TEACHER USE IN INDUSTRIAL ARTS CRAFTS COURSES. IT WAS DEVELOPED BY A COMMITTEE OF TEACHERS. ILLUSTRATIONS, PLANS, MATERIAL LISTS, PROCEDURAL LISTS, AND REFERENCES ARE GIVEN FOR 35 INTERMEDIATE LEATHER PROJECTS. LINE DRAWINGS AND PHOTOGRAPHS ILLUSTRATE THE TEXT. A SIMILAR PUBLICATION FOR BEGINNERS WHICH CONTAINS 30 SIMPLE LEATHER PROJECTS IS AVAILABLE AS VT 007 779. (EM)

VT 007 807
HOW TO USE TAPS, DIES AND HIGH SPEED STEEL DRILLSL.

HANSON (HENRY L.) CO., INC., WORCESTER, MASS.
HENRY L. HANSON, CO., INC., 25 UNION STREET, WORCHESTER, MASSACHUSETTS 01608 (WITHOUT CHARGE).
PUB DATE - 68 16P.

DESCRIPTORS - *RESOURCE MATERIALS; *INDUSTRIAL ARTS; *HAND TOOLS; EQUIPMENT UTILIZATION
IDENTIFIERS - *THREADING

ABSTRACT - THIS BOOKLET WAS DEVELOPED BY A MANUFACTURER TO PROVIDE BASIC INFORMATION ON THREADING TAPS AND DIES AND TWIST DRILLS. IT IS FOR USE BY STUDENTS OR TEACHERS IN APPROPRIATE COURSES DEALING WITH METAL WORK. DIRECTIONS FOR PROPER USE, NOMENCLATURE, AND DESCRIPTIVE INFORMATION ARE GIVEN. ALSO INCLUDED ARE TAP DRILL SIZE CHARTS. THE BOOKLET IS 5" X 8" AND IS ILLUSTRATED. (EM)

VT 007 844 ED 031 554
UNITS FOR THE LABORATORY OF INDUSTRIES.

GORHAM STATE COLL., MAINE
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - AUG68 486P.MATERIALS DEVELOPED AT AN NDEA INSTITUTE (GORHAM, MAINE, JULY 1-AUGUST 9, 1968).

DESCRIPTORS - *UNITS OF STUDY (SUBJECT FIELDS); *MANUFACTURING INDUSTRY; *INDUSTRIAL ARTS; *LESSON PLANS; *SECONDARY GRADES;

SUMMER INSTITUTES; CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS; UNIT PLAN; TEACHING GUIDES; RESOURCE MATERIALS; EDUCATIONAL FACILITIES; RECORDS (FORMS); TRANSPARENCIES; TESTS; LEARNING ACTIVITIES; INDUSTRIAL STRUCTURE
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - THIS INSTITUTE FOCUSED ON MANUFACTURING INDUSTRIES FOR JUNIOR HIGH INDUSTRIAL ARTS. IT WAS ATTENDED BY 20 TEACHERS FROM 14 STATES WHO WORKED IN FOUR GROUPS TO DEVELOP PAIRS OF INSTRUCTIONAL UNITS TITLED "INTRODUCTION TO TECHNOLOGY AND INDUSTRIAL ARTS." EACH OF THESE UNITS COVERS PERSONNEL MANAGEMENT, ENGINEERING, PRODUCTION, FINANCE, AND MARKETING AND WAS TO BE SUITABLE FOR A "LABORATORY OF INDUSTRIES" APPROACH. INCLUDED WERE PURPOSES, PUPIL ACTIVITIES, SUGGESTED CONTENT, AND AN EVALUATION UNIT. THESE UNITS WERE TESTED ON 60 BOYS AND GIRLS AND VIDEO TAPES WERE MADE AND EVALUATED BY THE PARTICIPANTS. (EM)

VT 007 850 ED 028 266
GUIDES IN CONSTRUCTION AND MANUFACTURING FOR ELEMENTARY SCHOOL INDUSTRIAL ARTS. K-2; 3-4; 5-6 .

OHIO STATE UNIV., COLUMBUS
PUB DATE - 68 254P.MATERIALS DEVELOPED AT NDEA INST. FOR ADVANCED STUDY IN ELEMENTARY INDUSTRIAL ARTS (COLUMBUS, SUMMER 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *CONSTRUCTION; *MANUFACTURING; KINDERGARTEN; *ELEMENTARY GRADES; LESSON PLANS
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - THIS SERIES OF THREE GUIDES WAS DEVELOPED BY 25 PARTICIPANTS IN THE INSTITUTE. ONE HUNDRED AND EIGHT INDUSTRIAL ARTS LESSON PLANS FOR GRADES K-6 ARE INCLUDED IN THESE GUIDES FOR CONSTRUCTION AND FOR MANUFACTURING INTENDED TO REFLECT THE CONTEMPORARY INDUSTRIAL AND TECHNOLOGICAL SOCIETY IN WHICH YOUNG CHILDREN LIVE. SOME TYPICAL CONSTRUCTION LESSONS ARE: (1) MAN AND TECHNOLOGY, (2) SELECTING A SITE, (3) LISTING MATERIALS, (4) CLEARING THE SITE AND GETTING READY TO BUILD, (5) ERECTING STEEL FRAMES, (6) MEDIATION, ARBITRATION, AND STRIKING, AND (7) MAINTAINING PROPERTY. SOME TYPICAL MANUFACTURING LESSONS ARE (1) MANUFACTURING AND THE ECONOMIC SYSTEM, (2) IDENTIFYING CONSUMER DEMAND, (3) DESIGNING POWER ELEMENTS, (4) OPERATING QUALITY CONTROL SYSTEMS, (5) ESTABLISHING ACCIDENT PREVENTION PROGRAMS, (6) HOT AND COLD WORKING PROCESSES, AND (7) SERVICING MANUFACTURED PRODUCTS. EACH LESSON INCLUDES OBJECTIVES, ACTIVITIES, TEACHING PROCEDURE, RELATIONSHIPS TO OTHER SUBJECTS, MATERIALS REQUIRED, AND A BIBLIOGRAPHY. (EM)

VT 007 853 ED 031 555
WOODWORKING TECHNOLOGY.

SAN DIEGO STATE COLL., CALIF. INDUSTRIAL ARTS DEPT.
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - AUG68 262P.MATERIALS DEVELOPED AT NDEA INST. FOR ADVANCED STUDY IN INDUSTRIAL ARTS (SAN DIEGO, JUNE 24-AUGUST 2, 1968).

DESCRIPTORS - *UNITS OF STUDY (SUBJECT FIELDS); *RESOURCE UNITS; *INDUSTRIAL ARTS; *WOODWORKING; LESSON PLANS; RESOURCE MATERIALS; LUMBER INDUSTRY; CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS; SUMMER INSTITUTES; TEACHING GUIDES; LEARNING ACTIVITIES
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE; WOODWORKING TECHNOLOGY

ABSTRACT - SIX TEACHING UNITS WHICH WERE DEVELOPED BY THE 24 INSTITUTE PARTICIPANTS ARE GIVEN. "WOOD IDENTIFICATION AND CHEMISTRY" COVERS THE PHYSICAL PROPERTIES AND STRUCTURAL FEATURES OF HARDWOODS AND SOFTWOODS. "SEASONING" EXPLAINS AIR DRYING, KILN DRYING, AND SEVEN SPECIAL LUMBER SEASONING PROCESSES. "RESEARCH ON LAMINATES" DESCRIBES THE BENDING OF SOLID WOOD AND WOOD LAMINATES, BEAM LAMINATION, LAMINATION ADHESIVES, AND PLASTIC LAMINATES. "PARTICLEBOARD: A TEACHING UNIT" EXPLAINS PARTICLEBOARD MANUFACTURING AND THE SEVERAL CLASSES OF PARTICLEBOARD AND THEIR USES. "LUMBER MERCHANDISING" OUTLINES LUMBER GRADES AND SOME WOOD BYPRODUCTS. "A TEACHING UNIT IN PHYSICAL TESTING OF JOINTS, FINISHES, ADHESIVES, AND FASTENERS" DESCRIBES TESTS OF FOUR COMMON EDGE JOINTS, FINISHES, WOOD ADHESIVES, AND WOOD SCREWS. EACH OF THESE UNITS INCLUDES A BIBLIOGRAPHY, GLOSSARY, AND STUDENT EXERCISES. (EM)

VT 007 857 ED 031 556
LAMINATING AND BENDING; A BASE SYLLABUS ON WOOD TECHNOLOGY.

EASTERN KENTUCKY UNIV., RICHMOND
PUB DATE - AUG68 63P.FROM NDEA INST. ON WOOD TECHNOLOGY (EASTERN KENTUCKY UNIV., JUNE 10-AUG. 2, 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; TEACHER EDUCATION; SUMMER INSTITUTES; *RESOURCE MATERIALS; MANUFACTURING; LUMBER INDUSTRY; TEACHER DEVELOPED MATERIALS; CURRICULUM DEVELOPMENT; INSTRUCTIONAL IMPROVEMENT
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - PREPARED BY PARTICIPANTS IN THE 1968 NATIONAL DEFENSE EDUCATION ACT INSTITUTE ON WOOD TECHNOLOGY, THIS SYLLABUS IS ONE OF A SERIES OF BASIC OUTLINES DESIGNED TO AID COLLEGE LEVEL INDUSTRIAL ARTS WOODWORKING INSTRUCTORS IN IMPROVING AND BROADENING THE SCOPE AND CONTENT OF THEIR PROGRAMS. THE MANUAL CONSISTS OF A BRIEF INTRODUCTION FOLLOWED BY SEVEN MAJOR UNIT TOPICS, INCLUDING: (1) LAMINATED TIMBERS, (2) KERF BINDING, (3) BENDING OF PLYWOOD, (4) BENDING STEAMED OR BOILED WOOD, (5) LAMINATION BENDING, (6) BAG MOULDING OF PLYWOOD, AND (7) ANHYDROUS AMMONIA BENDING. MOST UNITS CONTAIN DESCRIPTIVE AND EXPLANATORY INFORMATION

OBJECTIVES, CONTENT OUTLINES, DRAWINGS AND DIAGRAMS, SUGGESTED PROCEDURES, AND USES OF THE MATERIALS PRODUCED. SUPPLEMENTARY MATERIALS INCLUDE A LIST OF FILMS AND FILMSTRIPS, A GLOSSARY, A BIBLIOGRAPHY, AND REFERENCE AND INSTRUCTIONAL AIDS. RELATED DOCUMENTS ARE AVAILABLE AS VT 007 858, VT 007 859 AND VT 007 861. (AW)

VT 007 858 ED 031 557
ADHESIVES; A BASE SYLLABUS ON WOOD TECHNOLOGY.

EASTERN KENTUCKY UNIV., RICHMOND
PUB DATE - AUG68 70P.FROM NDEA INST. ON WOOD TECHNOLOGY (EASTERN KENTUCKY UNIV., JUNE 10-AUG. 2, 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *ADHESIVES; SUMMER INSTITUTES; CURRICULUM DEVELOPMENT; *WOODWORKING; *RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT; TEACHER EDUCATION
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - PREPARED BY PARTICIPANTS IN THE 1968 NATIONAL DEFENSE EDUCATION ACT INSTITUTE ON WOOD TECHNOLOGY, THIS SYLLABUS IS ONE OF A SERIES OF BASIC OUTLINES DESIGNED TO AID COLLEGE LEVEL INDUSTRIAL ARTS INSTRUCTORS IN IMPROVING AND BROADENING THE SCOPE AND CONTENT OF THEIR PROGRAMS. THE GUIDE IS DIVIDED INTO THREE SECTIONS, THE FIRST OF WHICH DEALS WITH THE TYPES OF CHARACTERISTICS OF ADHESIVES AND INCLUDES A DISCUSSION OF EACH OF THE IMPORTANT ADHESIVES. UNIT II IS CONCERNED WITH APPLICATION, CLAMPING, AND CURING OF ADHESIVES, AND CONTAINS EXCERPTS FROM ARTICLES ON GLUES AND ADHESIVES, DRAWINGS, AND PHOTOGRAPHS TO ILLUSTRATE THE MATERIAL COVERED. THE THIRD UNIT IS A DISCUSSION OF ADHESIVE BOND TESTS AND THE TECHNIQUES FOR CONDUCTING THEM. SUPPLEMENTARY MATERIALS INCLUDED ARE A GLOSSARY, A BIBLIOGRAPHY, AND AN APPENDIX LISTING GLUE AND ADHESIVE MANUFACTURERS. RELATED DOCUMENTS ARE AVAILABLE AS VT 007 857, VT 007 859, AND VT 007 861. (AW)

VT 007 859 ED 031 558
LUMBER AND RELATED PRODUCTS; A BASE SYLLABUS ON WOOD TECHNOLOGY.

EASTERN KENTUCKY UNIV., RICHMOND
PUB DATE - AUG68 108P.FROM NDEA INST. ON WOOD TECHNOLOGY (EASTERN KENTUCKY UNIV., JUNE 10-AUG. 2, 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; LUMBER INDUSTRY; *BUILDING MATERIALS; *WOODWORKING; CURRICULUM DEVELOPMENT; SUMMER INSTITUTES; TEACHER EDUCATION; *RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - PREPARED BY PARTICIPANTS IN THE 1968 NATIONAL DEFENSE EDUCATION ACT INSTITUTE ON WOOD TECHNOLOGY, THIS SYLLABUS IS ONE OF A SERIES OF BASIC OUTLINES DESIGNED TO AID COLLEGE LEVEL INDUSTRIAL ARTS INSTRUCTORS IN IMPROVING AND BROADENING THE SCOPE AND CONTENT OF THEIR PROGRAMS. THE PRIMARY OBJECTIVE OF THIS COURSE OUTLINE IS TO POINT OUT THE IMPORTANCE AND THE MANY USES OF WOOD AND WOOD PRODUCTS. TOPICS COVERED ARE: (1) LUMBER GRADES AND SIZES, (2) PLYWOOD, (3) VENEER, (4) FIBERBOARD, (5) PARTICLEBOARD, (6) SHEETBOARD, (7) INSULATION BOARD, (8) STRUCTURAL SANDWICH CONSTRUCTION, (9) SHINGLES, (10) PULP AND PAPER, (11) WOOD FLOUR, AND (12) CELLULOSE-DERIVED PRODUCTS. MOST UNITS CONTAIN INFORMATION ON MANUFACTURING PROCESSES, PROPERTIES, TYPES AND GRADES, AND USES OF THE PRODUCTS. SELECTED BIBLIOGRAPHIES ARE LISTED FOR EACH UNIT. THE FINAL SECTION PROVIDES INSTRUCTIONAL AIDS, SUGGESTED PROJECTS AND STUDENT ACTIVITIES, AND MATERIALS AND EQUIPMENT NEEDED FOR SPECIFIC PROJECTS. THE DOCUMENT IS ILLUSTRATED WITH DRAWINGS, CHARTS, AND PHOTOGRAPHS. RELATED DOCUMENTS ARE AVAILABLE AS VT 007 857, VT 007 858, AND VT 007 861. (AW)

VT 007 860 ED 031 559
WOOD SUBSTITUTES; A BASE SYLLABUS ON WOOD TECHNOLOGY.

EASTERN KENTUCKY UNIV., RICHMOND
PUB DATE - AUG68 58P.FROM NDEA INST. ON WOOD TECHNOLOGY (EASTERN KENTUCKY UNIV., JUNE 10-AUG. 2, 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; TEACHER EDUCATION; *RESOURCE MATERIALS; SUMMER INSTITUTES; TEACHER DEVELOPED MATERIALS; CURRICULUM DEVELOPMENT; INSTRUCTIONAL IMPROVEMENT
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE; WOOD SUBSTITUTES

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY COLLEGE INSTRUCTORS CONCERNED WITH EXPANDING TRADITIONAL WOODWORKING PROGRAMS. IT WAS DEVELOPED IN A NATIONAL DEFENSE EDUCATION ACT SUMMER INSTITUTE AND IS BASED ON AN OUTLINE PROVIDED BY MEMBERS OF A PREVIOUS INSTITUTE. THE CONTENT CONCERNS WOOD SUBSTITUTES WHICH ARE MADE TO RESEMBLE WOOD AND ARE OFTEN USED WITH WOOD BUT CONTAIN NO WOOD OR WOOD PRODUCTS. UNITS ARE (1) THE MANUFACTURE OF HIGH PRESSURE PLASTIC LAMINATE, (2) VINYLWOOD VENEERS, (3) VINYL WRAPPED WOOD SUBSTITUTES, (4) WOOD GRAIN REPRODUCTION ON WOOD AND OTHER MATERIALS, AND (5) HIGH PRESSURE MOLDED PRODUCTS. EACH UNIT CONTAINS INFORMATION RELATIVE TO THE DEVELOPMENT, USE, AND PRODUCTION OF THE WOOD SUBSTITUTES AND A REFERENCE BIBLIOGRAPHY. (EM)

VT 007 861 ED 031 560
WOOD PROPERTIES AND KINDS; A BASE SYLLABUS ON WOOD TECHNOLOGY.

EASTERN KENTUCKY UNIV., RICHMOND
PUB DATE - AUG68 130P.FROM NDEA INST. ON WOOD TECHNOLOGY (EASTERN KENTUCKY UNIV., JUNE 10-AUG. 2, 1968).

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL

ARTS; *PLANT SCIENCE; PLANT GROWTH; LUMBER INDUSTRY; TREES; SUMMER INSTITUTES; PLANT IDENTIFICATION; BUILDING MATERIALS; *WOODWORKING; CURRICULUM DEVELOPMENT; TEACHER EDUCATION; *RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; INSTRUCTIONAL IMPROVEMENT; LEARNING ACTIVITIES
IDENTIFIERS - *NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - PREPARED BY PARTICIPANTS IN THE 1968 NATIONAL DEFENSE EDUCATION ACT INSTITUTE ON WOOD TECHNOLOGY, THIS SYLLABUS IS ONE OF A SERIES OF BASIC OUTLINES DESIGNED TO AID COLLEGE LEVEL INDUSTRIAL ARTS INSTRUCTORS IN IMPROVING AND BROADENING THE SCOPE AND CONTENT OF THEIR PROGRAMS. THIS BOOKLET IS CONCERNED LARGELY WITH THE PHYSICAL COMPOSITION AND BEHAVIOR OF WOOD AND THE FACTORS INFLUENCING ITS UTILIZATION. HEADINGS OF THE FIVE MAJOR UNITS ARE: (1) WOOD, WHAT IT IS, (2) THE PLANT ORIGIN OF WOOD, (3) GROSS FEATURES OF WOOD, (4) NATURAL DEFECTS IN WOOD, AND (5) THE IDENTIFICATION OF WOOD. A SECTION OF EXPERIMENTS, INCLUDING TEACHING AIDS, EQUIPMENT NEEDED, SAMPLE TEST QUESTIONS, SUGGESTED STUDENT PROBLEMS AND PROJECTS, AND REFERENCES, PRESENTS INFORMATION ON SUCH PROPERTIES OF WOOD AS DENSITY AND SPECIFIC GRAVITY, MOISTURE CONTENT, STRENGTH CHARACTERISTICS, AND STRUCTURE. THE GUIDE IS ILLUSTRATED THROUGHOUT WITH DRAWINGS, DIAGRAMS, PHOTOGRAPHS, TABLES, AND GRAPHS. A GLOSSARY AND BIBLIOGRAPHY ARE INCLUDED. RELATED DOCUMENTS ARE AVAILABLE AS VT 007 857, VT 007 858, AND VT 007 859. (AW)

VT 007 864
INDUSTRIAL ARTS GRAPHIC COMMUNICATIONS 10, 20, 30.

DEPT. OF EDUCATION, EDMONTON (ALBERTA)
GOVERNMENT OF THE PROVINCE OF ALBERTA, DEPARTMENT OF EDUCATION, ROOM 712, STATIONARY AND SUPPLIES, ADMINISTRATION BUILDING, EDMONTON, ALBERTA.
PUB DATE - SEP68 44P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *GRAPHIC ARTS; DRAFTING; PHOTOGRAPHY; PRINTING; COMMUNICATIONS

ABSTRACT - DEVELOPED BY A COMMITTEE OF TEACHERS, SUPERVISORS, AND TEACHER EDUCATORS FOR TEACHER USE IN THREE MULTIPLE ACTIVITY PROGRAMS IN GRAPHICS, THIS CURRICULUM GUIDE IS DESIGNED FOR GRADES 10, 11 AND 12, COVERING 8,000 MINUTES PER COURSE OR A TOTAL OF 24,000 MINUTES FOR ALL THREE COURSES. THE CONTENTS INCLUDE: (1) GENERAL INTRODUCTION, (2) INTRODUCTION TO GRAPHIC COMMUNICATIONS. COURSE ORGANIZATION, AND OBJECTIVES, (3) GRAPHIC COMMUNICATIONS 10, INCLUDING ONE UNIT EACH OF DRAFTING AND PHOTOGRAPHY, AND TWO UNITS OF PRINTING AND REPRODUCING PROCESSES, (4) GRAPHIC COMMUNICATIONS 20, INCLUDING ONE UNIT EACH OF DRAFTING AND PHOTOGRAPHY, AND TWO UNITS OF PRINTING AND PROCESSING, AND (5) GRAPHIC COMMUNICATIONS 30, INCLUDING ONE UNIT EACH IN DRAFTING, PHOTOGRAPHY, PRINTING AND REPRODUCING PROCESSES, AND BINDERY. REFERENCES ARE INCLUDED FOR EACH COURSE. (GR)

VT 007 934
JUNIOR HIGH SCHOOL CURRICULUM GUIDE FOR INDUSTRIAL ARTS.

DEPT. OF EDUCATION, EDMONTON (ALBERTA)
PUB DATE - SEP65 83P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; UPPER GRADES
IDENTIFIERS - ALBERTA; CANADA

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS OF JUNIOR HIGH SCHOOL PROGRAMS. IT WAS DEVELOPED BY A COMMITTEE OF TEACHERS, SUPERVISORS, AND TEACHER EDUCATORS FOR THE PROVINCE OF ALBERTA, CANADA. BRIEF UNIT OUTLINES ARE GIVEN FOR (1) ELECTRICITY, (2) ELECTRONICS, (3) WOODWORK, (4) GRAPHIC COMMUNICATIONS, (5) GRAPHIC ARTS, (6) POWER MECHANICS, (7) PLASTICS, (8) MACHINE SHOP, (9) SHEET AND BENCH METAL, (10) ELECTRONIC COMPUTERS, (11) INDUSTRIAL CRAFTS, CERAMICS, (12) LEATHER, (13) ART METAL, AND (14) LAPIDARY. SAMPLE INSTRUCTION SHEETS ARE APPENDED. (EM)

VT 007 972
BLODGETT, OMER W.
DESIGN FOR WELDING. SOME PRACTICAL CONSIDERATIONS IN DESIGNING STEEL WELDMENTS.

AMERICAN WELDING SOCIETY, NEW YORK, N.Y.
UNITED ENGINEERING CENTER
AMERICAN WELDING SOCIETY, 345 EAST 47TH STREET, NEW YORK, NEW YORK 10017 ($2.50).
PUB DATE - 68 86P.PRESENTED AT ANNUAL AWS MEETING (49TH, CHICAGO, APRIL, 1968).

DESCRIPTORS - *SUPPLEMENTARY TEXTBOOKS; *INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION; *WELDING; *DESIGN; TECHNICAL EDUCATION

ABSTRACT - THIS BOOKLET IS FOR USE BY COLLEGE STUDENTS, TEACHERS, OR ENGINEERS INTERESTED IN THE DESIGN AND FABRICATION OF WELDMENTS. IT FOCUSES ON A SYSTEMS APPROACH TO WELDMENTS UTILIZING ADVANCED DESIGN AND FABRICATION TECHNIQUES INVOLVING THE EFFICIENT USE OF STEEL. MAJOR TOPICS ARE: (1) THE SYSTEM APPROACH TO THE EFFICIENT USE OF STEEL, (2) WHAT THE DESIGNER NEEDS TO KNOW, (3) THE DESIGN APPROACH--PART OF WHOLE, (4) DESIGNING FOR STRENGTH AND RIGIDITY, (5) THE DESIGN PROCEDURE, (6) REDESIGN BY EQUIVALENT SECTION, (7) THE DESIGN OF WELDED JOINTS, (8) QUALITATIVE VS. QUANTITATIVE METHODS, (9) MEETING A DESIGN PROBLEM, (10) POTENTIAL SOURCES OF TROUBLE, (11) THE OVER-ALL VIEW, AND (12) IDENTIFICATION OF A DESIGN PROBLEM. ILLUSTRATIONS, EXAMPLES, FORMULAE, AND NOMOGRAPHS ARE PROVIDED FOR PURPOSES OF CLARIFICATION AND PRACTICALITY. (EM)

VT 008 004
BUCHANAN, GLEN, AND OTHERS
A STUDY OF MANUFACTURING INDUSTRIES. AN EXPERIMENTAL COURSE AT THE JUNIOR HIGH SCHOOL LEVEL COMBINING STUDENTS OF GRADES SEVEN, EIGHT, AND NINE.

SHILOH JUNIOR HIGH, PARMA, OHIO
PUB DATE - ND 28P.

DESCRIPTORS - *INDUSTRIAL ARTS; *EXPERIMENTAL CURRICULUM; TEAM TEACHING; JUNIOR HIGH SCHOOLS; *COURSE DESCRIPTIONS; *MANUFACTURING
IDENTIFIERS - *SHILOH JUNIOR HIGH SCHOOL; PARMA; OHIO

ABSTRACT - THE MAJOR AIMS OF THIS EXPERIMENTAL INDUSTRIAL ARTS COURSES WERE TO DEVELOP: (1) AN UNDERSTANDING OF THE GROWTH AND DEVELOPMENT OF AMERICAN INDUSTRY, (2) AN UNDERSTANDING OF THE FUNCTIONS OF MANUFACTURING INDUSTRIES, AND (3) THE ABILITY TO SOLVE PROBLEMS RELATED TO THE FUNCTIONS OF MANUFACTURING. SEVENTH AND EIGHTH GRADE CLASSES WHICH MET THE SAME PERIOD WERE COMBINED ON A REGULAR BASIS AND A NINTH GRADE CLASS PARTICIPATED INTERMITTENTLY. A TEACHING TEAM INVOLVED THREE INDUSTRIAL ARTS TEACHERS. THE FUNCTIONS OF MANUFACTURING WHICH WERE TAUGHT WERE: (1) MANAGEMENT, (2) FINANCE, (3) PRODUCTION PLANNING AND CONTROL, (4) THE MANUFACTURING, AND (5) MARKETING. STUDENT CORPORATIONS WERE FORMED, PRODUCT RESEARCH AND DEVELOPMENT WAS DONE, PRODUCTION METHODS WERE EXAMINED, AND A PRODUCT WAS SELECTED AND PRODUCED. EVALUATION OF STUDENTS AND TEACHERS BY TEACHERS AND STUDENTS WAS EMPHASIZED. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED. (EM)

VT 008 041
INDUSTRIAL ARTS EDUCATION CURRICULUM GUIDE.

VERMONT INDUSTRIAL ARTS TEACHERS' ASSOCIATION
VERMONT STATE DEPT. OF EDUCATION, MONTPELIER. DIV. OF INSTRUCTIONAL SERVICES
PUB DATE - 68 66P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; SECONDARY GRADES; COURSE DESCRIPTIONS

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY ADMINISTRATORS AND INDUSTRIAL ARTS TEACHERS IN HIGH SCHOOL PROGRAMS. IT IS A RESULT OF WORK DONE BY A COMMITTEE OF TEACHERS AND A STATE CONSULTANT. TOPICAL OUTLINES ARE GIVEN FOR: (1) DRAFTING, (2) ELECTRICITY, (3) GENERAL METAL, (4) GRAPHIC ARTS, (5) POWER MECHANICS, (6) WOODWORKING. EACH OUTLINE INCLUDES GENERAL, SPECIFIC AND MINIMUM COURSE OBJECTIVES, UNIT OUTLINES, AND LISTS OF TOOLS, EQUIPMENT SUPPLIES, AND INSTRUCTIONAL AIDS. (EM)

VT 008 052
INDUSTRIAL ARTS.

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
PUB DATE - 68 100P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *MANUFACTURING; GRADE 7; GRADE 8; SIMULATION; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *PRODUCTION TECHNOLOGY

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS, PRINCIPALS, AND OTHERS CONCERNED WITH COURSES COVERING THE PRINCIPLES, PROCESSES, AND CONCEPTS OF PRODUCTION TECHNOLOGY. IT WAS DEVELOPED BY TEACHERS AND TEACHER EDUCATORS WORKING WITH A STATE SUPERVISOR. THE BASIS AND ORGANIZATION OF THIS GUIDE IS THE PRODUCTION TECHNOLOGY CYCLE: (1) ORIENTATION OR DEVELOPING THE IDEA, (2) ORGANIZATION OF THE CLASS AS A MODEL INDUSTRY, (3) PRE-PRODUCTION PLANNING, (4) PRODUCTION RUN, AND (5) TERMINAL REPORTS. DESCRIPTIVE AND SAMPLE INSTRUCTIONAL MATERIALS AND OBJECTIVES ARE INCLUDED FOR EACH OF THESE SECTIONS. CORPORATE AND MASS PRODUCTION SIMULATION BY STUDENTS IS INVOLVED THROUGHOUT THE GUIDE. IT IS FOR USE IN GRADES 7 OR 8. (EM)

VT 008 071
INDUSTRIAL ARTS; SAFETY GUIDE.

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKE CITY, UTAH 84111 ($1.00).
PUB DATE - 68 44P.

DESCRIPTORS - *PROGRAM GUIDES; *INDUSTRIAL ARTS; SAFETY EDUCATION; *SCHOOL SAFETY; *ACCIDENT PREVENTION; *SCHOOL SHOPS; SECONDARY GRADES; ILLUSTRATIONS
IDENTIFIERS - UTAH

ABSTRACT - THIS SAFETY GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS. IT WAS DEVELOPED BY A COMMITTEE UNDER THE DIRECTION OF A STATE SUPERVISOR. INFORMATION AND STANDARDS ARE COVERED UNDER 21 TOPICS, SOME OF WHICH ARE: (1) TEACHER LIABILITY, (2) SAFEGUARDING MACHINES, (3) SAFETY PERSONNEL ORGANIZATION, (4) HOUSEKEEPING, (5) EXPLOSIVE HAZARDS, (6) ELECTRICAL HAZARDS, (7) ILLUMINATION, (8) TREATMENT OF INJURIES, AND (9) ACCIDENT REPORTING. UTAH HOUSE BILL NO. 25--EYE SAFETY LAW, SHOP SAFETY INSPECTION CHECK LIST, ILLUSTRATIONS OF MINIMUM MACHINE SAFETY ZONES, ILLUSTRATIONS OF FIRE EXTINGUISHERS, AND A SAMPLE ACCIDENT REPORT FORM ARE APPENDED. (EM)

VT 008 072
INDUSTRIAL ARTS; GRAPHIC ARTS.

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKE CITY, UTAH 84111 ($1.00).
PUB DATE - 68 47P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *GRAPHIC ARTS; SECONDARY GRADES; INSTRUCTIONAL MATERIALS; BIBLIOGRAPHIES
IDENTIFIERS - UTAH

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF SEVERAL RELATED GUIDES DEVELOPED TO PROVIDE ADMINISTRATORS AND INDUSTRIAL ARTS TEACHERS WITH THE STATE ADOPTED CURRICULUM OUTLINE FOR GRAPHIC ARTS. IT WAS DEVELOPED UNDER THE DIRECTION OF A STATE SUPERVISOR. MAJOR SECTIONS ARE DEFINITIONS OF THE SEVEN GRAPHIC ARTS AREAS, THE JUNIOR HIGH SCHOOL GRAPHIC ARTS PROGRAM, AND THE SENIOR HIGH SCHOOL GRAPHIC ARTS PROGRAM. PROVIDED ARE PHILOSOPHICAL STATEMENTS, PROGRAM OBJECTIVES,

TOPICAL OUTLINES FOR COURSES, STUDENT ACTIVITIES, AND TEACHING AIDS. LISTS OF BOOKS, FILMS AND FILM STRIPS, FILM SOURCES, AND EQUIPMENT ARE INCLUDED. (EM)

VT 008 156
INDUSTRIAL ARTS; POWER MECHANICS AND SMALL ENGINES.

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKE CITY, UTAH 84111 ($1.00).
PUB DATE - 68 32P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *ENGINES; *POWER MECHANICS; SECONDARY GRADES; INSTRUCTIONAL MATERIALS; BIBLIOGRAPHIES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE IN A SERIES DEVELOPED TO PROVIDE ADMINISTRATORS AND INDUSTRIAL ARTS TEACHERS WITH THE STATE-ADOPTED CURRICULUM FOR POWER AND SMALL ENGINE MECHANICS. IT WAS DEVELOPED BY A COMMITTEE UNDER THE DIRECTION OF A STATE SUPERVISOR. COURSE OUTLINES ARE PROVIDED FOR A 9-WEEK AND AN 18-WEEK COURSE APPROPRIATE FOR USE AT THE NINTH-GRADE LEVEL. EACH PROVIDES A TOPICAL OUTLINE, TIME ALLOTMENT, AND INSTRUCTIONAL AIDS AND ACTIVITIES. SUPPLEMENTARY MATERIALS INCLUDE A SAMPLE PROCEDURE SHEET, TEACHING GUIDE, FILM LIST, TOOL LIST, AND TEACHING AIDS. (EM)

VT 008 184 ED 033 193
WOLANSKY, WILLIAM D.; COCHRAN, LESLIE H.
COURSE OUTLINE AND RESOURCE MATERIALS FOR FLUID POWER INSTRUCTION IN SECONDARY SCHOOLS, PREPARED AT THE NDEA SUMMER INSTITUTE(DETROIT, JUNE 24-AUGUST 2, 1968).

WAYNE STATE UNIV., DETROIT, MICH. DEPT. OF INDUSTRIAL EDUCATION.
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - 68 37P.

DESCRIPTORS - *FLUID POWER EDUCATION; INDUSTRIAL ARTS; *COURSE CONTENT; SCHOOL SHOPS; SUMMER INSTITUTES; INSTRUCTIONAL MATERIALS; *INSTRUCTIONAL AIDS; *TEACHER DEVELOPED MATERIALS
IDENTIFIERS - NATIONAL DEFENSE EDUCATION ACT TITLE XI INSTITUTE; NDEA TITLE XI INSTITUTE

ABSTRACT - THIS COURSE OUTLINE WAS DEVELOPED BY INDUSTRIAL ARTS TEACHERS DURING THE 1968 NATIONAL DEFENSE EDUCATION ACT SUMMER INSTITUTE. IT IS INTENDED FOR THE SPECIFIC USE OF TEACHERS INVOLVED IN FLUID POWER COURSES. A TOPICAL OUTLINE COVERS TERMINOLOGY, EQUIPMENT, PROCEDURES, AND SAFETY TECHNIQUES. OTHER SECTIONS INCLUDE A BOOK LIST, A BOOK EVALUATION FORM, AN AUDIOVISUAL MATERIALS LIST, AND FLOOR PLANS FOR SCHOOL LABORATORIES. THE APPENDIX INCLUDES A PARTICIPANT LIST. THE FINAL REPORT OF THE INSTITUTE IS AVAILABLE AS VT 008 185 (ARM FALL 1970). (EM)

VT 008 219
COUNTY COURSE OF STUDY: INDUSTRIAL ARTS.

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE
PUB DATE - 66 58P.

DESCRIPTORS - *PROGRAM GUIDES; CURRICULUM GUIDES; *INDUSTRIAL ARTS; SECONDARY GRADES; EDUCATIONAL EQUIPMENT; PROGRAM CONTENT; EVALUATION CRITERIA; *PROGRAM DEVELOPMENT; EDUCATIONAL OBJECTIVES; EDUCATIONAL FACILITIES

ABSTRACT - THIS PROGRAM GUIDE WAS PREPARED BY A DEVELOPMENTAL GROUP OF TEACHERS THROUGH AN EXAMINATION AND RESTATEMENT OF THE PLACE AND PURPOSE OF INDUSTRIAL ARTS EDUCATION IN A CHANGING, EVER-EXPANDING INDUSTRIAL AND TECHNICAL SOCIETY. GUIDELINES FOR PROGRAM DEVELOPMENT AND EVALUATION ARE PROVIDED FOR A DIFFERENTIATED INDUSTRIAL ARTS PROGRAM BASED ON ORIENTATION AND EXPLANATORY EXPERIENCES IN THE JUNIOR HIGH SCHOOL AND CHARACTERIZED BY SPECIALIZATION AND CONCENTRATION IN THE SENIOR HIGH SCHOOL. THE GUIDELINES ARE DESIGNED TO ASSIST SCHOOL BOARDS, ADMINISTRATORS, AND TEACHERS IN PLANNING AND DEVELOPING GENERAL AND SPECIFIC PROGRAM OBJECTIVES, PROGRAM FINANCING, AND LABORATORY FACILITIES AND EQUIPMENT. THE COURSE OF STUDY OUTLINES LEARNING UNITS AND ACTIVITIES FOR (1) A 12-WEEK INDUSTRIAL CRAFTS COURSE FOR GRADE 7, (2) 1-YEAR COURSES IN DRAFTING, GENERAL METALS, WOODWORKING, ELECTRONICS, AND POWER MECHANICS FOR GRADES 10-12. A LIST OF EDUCATIONAL EQUIPMENT NECESSARY TO PROVIDE ADEQUATE INSTRUCTION IS GIVEN. (EM)

VT 008 238
A GUIDE TO IMPROVEMENT OF INDUSTRIAL ARTS IN OKLAHOMA SCHOOLS GRADES 7-12L.

OKLAHOMA CURRICULUM IMPROVEMENT COMMISSION
OKLAHOMA STATE DEPT. OF EDUCATION, OKLAHOMA CITY
E
PUB DATE - 6 541P

DESCRIPTORS - .*STATE CURRICULUM GUIDES; *PROGRAM GUIDES; *INDUSTRIAL ARTS; EDUCATIONAL OBJECTIVES; *CURRICULUM; *PROGRAM DESCRIPTIONS; TEACHER QUALIFICATIONS; SCHOOL SAFETY; PROGRAM EVALUATION; SECONDARY GRADES; BIBLIOGRAPHIES; INSTRUCTIONAL AID
IDENTIFIERS - *OKLAHOM

ABSTRACT - THIS PROGRAM GUIDE IS FOR USE BY TEACHERS AND ADMINISTRATORS CONCERNED WITH INDUSTRIAL ARTS PROGRAMS. IT WAS DEVELOPED BY THE STATE INDUSTRIAL ARTS STUDY COMMITTEE OF THE OKLAHOMA CURRICULUM IMPROVEMENT COMMISSION AND RESULTED FROM A PROJECT WHICH WAS STARTED IN 1960. MAJOR SECTIONS ARE TITLED: (1) PHILOSOPHY OF INDUSTRIAL ARTS, (2) THE PROGRAM: SCOPE AND SEQUENCE OF INDUSTRIAL ARTS COURSES, (3) ORGANIZATION AND ADMINISTRATION, (4) ACADEMIC PREPARATION AND PROFESSIONAL PARTICIPATION, (5) EVALUATION, AND (6) SAFETY IN THE SCHOOL SHOP. SUPPLEMENTARY MATERIALS INCLUDE A STUDENT ACCIDENT REPORT FORM, THE NATIONAL SAFETY COUNCIL INSPECTION CHECK LIST, AND A CURRICULUM MATERIALS BIBLIOGRAPHY. (EM)

VT 008 251
SUGGESTED RELATED INFORMATION FOR THE ELECTRICITY AREA. INDUSTRIAL ARTS COMPREHENSIVE GENERAL SHOP COURSE.

NEW YORK STATE EDUCATION DEPT., ALBANY
PUB DATE - 65 185P.

DESCRIPTORS - *STUDY GUIDES; *INDUSTRIAL ARTS; *ELECTRICITY; JUNIOR HIGH SCHOOLS; LEARNING ACTIVITIES; TESTS; BIBLIOGRAPHIES

ABSTRACT - THIS STUDY GUIDE IS DESIGNED TO DIRECT THE INDUSTRIAL ARTS STUDENT IN THE STUDY OF RELATED SUBJECT MATTER IN GENERAL ELECTRICITY IN THE 7TH, 8TH, AND 9TH GRADE COMPREHENSIVE GENERAL SHOP. IT WAS DEVELOPED BY A TEACHER AND STATE SUPERVISOR IN COOPERATION WITH THE NEW YORK BUREAU OF VOCATIONAL CURRICULUM DEVELOPMENT AND INDUSTRIAL TEACHER TRAINING AND THE BUREAU OF INDUSTRIAL ARTS EDUCATION. TO ASSIST THE INSTRUCTOR IN LESSON SELECTION AND USE, THE 79 LESSON TOPICS ARE GROUPED INTO 6 DIVISIONS OF (1) PLANNING, (2) SOCIAL-ECONOMICS, (3) GUIDANCE, (4) SCIENCE, (5) SAFETY AND HYGIENE, AND (6) CONSUMER VALUES. EACH LESSON TOPIC IS PREPARED FOR A 10-MINUTE AVERAGE TEACHER PRESENTATION AND INCLUDES SPECIFIC BACKGROUND INFORMATION RELATED TO THE TOPIC, A LIST OF TOPIC OBJECTIVES, REFERENCES, A STUDENT ACTIVITY ASSIGNMENT AND A TOPIC TEST. THE MATERIAL IS COORDINATED TO THE RELATED LESSON TOPICS IN THE NEW YORK STATE SYLLABUS FOR THE COMPREHENSIVE GENERAL SHOP. THE APPENDIX CONTAINS A COMPOSITE BIBLIOGRAPHY OF BOOKS, FILMS, MAGAZINES, AND PERIODICALS AS WELL AS A DETAILED INDEX OF THE STUDY GUIDE CONTENTS. (HC)

VT 008 253
INDUSTRIAL ARTS SYLLABUS IN TRANSPORTATION.

STATE UNIV. OF NEW YORK, ALBANY. BUREAU OF SECONDARY CURRICULUM DEVELOPMENT
PUB DATE - 66 101P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *TRANSPORTATION; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY TEACHERS AND ADMINISTRATORS CONCERNED WITH AN INDUSTRIAL ARTS COURSE ON TRANSPORTATION. IT WAS PREPARED BY A COMMITTEE OF TEACHERS. MAJOR DIVISIONS OF THE COURSE OUTLINE ARE SMALL ENGINES, AUTOMOTIVE TRANSPORTATION, AVIATION TRANSPORTATION, AND MARINE TRANSPORTATION. OPTIONAL DIVISIONS TREAT BICYCLES, MOTORCYCLES, FARM TRACTORS, DIESEL ENGINES, JET ENGINES, AND RAILROADS. EACH OF THESE LISTS DEMONSTRATIONS, OPERATIONS AND PROCESSES, AND RELATED LESSON TOPICS WHICH COVER PLANNING, SOCIAL ECONOMICS, SCIENCE, SAFETY AND HYGIENE, AND CONSUMER VALUES. (EM)

VT 008 255
INDUSTRIAL ARTS EDUCATION.

SOUTH DAKOTA STATE BOARD OF EDUCATION, PIERRE
SOUTH DAKOTA STATE DEPARTMENT OF EDUCATION, PIERRE, SOUTH DAKOTA (SINGLE COPIES AVAILABLE).
PUB DATE - 67 80P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; SECONDARY GRADES
IDENTIFIERS - SOUTH DAKOTA

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS AND ADMINISTRATORS CONCERNED WITH SECONDARY COURSES. IT WAS DEVELOPED BY A CURRICULUM COMMITTEE UNDER THE DIRECTION OF A STATE SUPERVISOR. MAJOR SECTIONS COVERING A JUNIOR AND SENIOR HIGH SCHOOL CURRICULUM ARE: (1) DRAFTING, (2) ELECTRICITY-ELECTRONICS, (3) GRAPHIC ARTS, (4) INDUSTRIAL CRAFTS, (5) METALS, (6) POWER MECHANICS, AND (7) WOODWORK. EACH SECTION PROVIDES OBJECTIVES AND TOPICAL OUTLINES AND CITES REFERENCES AND AIDS FOR SEVERAL COURSES. (EM)

VT 008 256
ELECTRICITY PROJECT IDEAS FOR INDUSTRIAL ARTS.

NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF INDUSTRIAL ARTS EDUCATION PUBLICATIONS DISTRIBUTION UNIT, STATE EDUCATION DEPARTMENT, ROOM 169, EDUCATION BUILDING, ALBANY, NEW YORK 12224.
PUB DATE - 65 137P.

DESCRIPTORS - *RESOURCE MATERIALS; *INDUSTRIAL ARTS; *ELECTRICITY; SECONDARY GRADES; *STUDENT PROJECTS

ABSTRACT - THIS MONOGRAPH CONTAINS 28 STUDENT PROJECTS AND 19 EXPERIMENTS FOR TEACHER USE IN GRADES 7-12. EACH UNIT CONSISTS OF AN ELECTRICAL PROJECT DESCRIPTION, PLAN, AND MATERIAL LIST AND CONSTRUCTION HINTS. THE EXPERIMENTS DEMONSTRATE BASIC THEORY OF ELECTRICITY AND ITS APPLICATION. (EM)

VT 008 259 ED 039 315
INSTRUCTIONAL UNITS FOR INDUSTRIAL MATERIALS, VOL. II.

SAN JOSE STATE COLL., CALIF.
PUB DATE - 68 308P.MATERIALS PREPARED AT NDEA INSTITUTE FOR ADVANCED STUDY IN INDUSTRIAL ARTS (SAN JOSE STATE COLL., JUN 24-AUG 2, 1968)

DESCRIPTORS - *INDUSTRIAL ARTS; *INSTRUCTIONAL MATERIALS; INDUSTRIAL ARTS TEACHERS; TECHNICAL EDUCATION; TRANSPARENCIES; AUDIOVISUAL AIDS; SLIDES; *RESOURCE MATERIALS; TEACHER DEVELOPED MATERIALS; MATERIAL DEVELOPMENT; PLASTICS; ELECTRONICS; GRAPHIC ARTS; LUBRICANTS; FUELS; *LABORATORY EXPERIMENTS
IDENTIFIERS - *NDEA INSTITUTE; NATIONAL DEFENSE EDUCATION ACT

ABSTRACT - THIS SECOND VOLUME CONTAINS THE REMAINDER OF THE EXPERIMENTS AND INSTRUCTIONAL MATERIAL DEVELOPED AT THE NDEA INSTITUTE. INCLUDED ARE SEVEN UNITS ON POLYMERS, THREE UNITS ON ELECTRONICS, THREE UNITS ON GRAPHIC ARTS, 10 UNITS ON FUELS AND LUBRICANTS, AND ONE UNIT ON TEXTILES. A LIST OF REVIEWED FILMS AND SOURCE AVAILABILITY IS APPENDED. VOLUME I IS AVAILABLE AS VT 008 258 (ALSO IN THIS ISSUE). (NOT AVAILABLE IN HARD

COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT). (GR)

VT 008 268
SAFETY EDUCATION IN THE SCHOOL SHOP.

GORHAM STATE TEACHERS COLL., MAINE.
INDUSTRIAL ARTS DEPT.
PUB DATE - ND 68P.

DESCRIPTORS - *RESOURCE MATERIALS; *INDUSTRIAL ARTS; SECONDARY GRADES; *SCHOOL SAFETY; *SCHOOL SHOPS

ABSTRACT - THIS SAFETY MANUAL IS FOR USE BY INDUSTRIAL ARTS TEACHERS. IT WAS DEVELOPED BY 17 TEACHERS ENROLLED IN A SUMMER COURSE. THE MAJOR PORTION OF THE DOCUMENT IS DEVOTED TO 35 CHECK LISTS OF SAFETY PRACTICES FOR JUNIOR AND SENIOR HIGH SCHOOL STUDENTS. GENERAL SAFETY REGULATIONS AND PRECAUTIONS ARE ALSO DISCUSSED. (EM)

VT 008 269 ED 026 273
FEIRER, JOHN L.
SPACE RESOURCES FOR THE HIGH SCHOOL.
INDUSTRIAL ARTS RESOURCE UNITS.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D.C.
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D.C. 20546.
PUB DATE - APR67 174P.

DESCRIPTORS - *RESOURCE GUIDES; *TEXTBOOKS; *INDUSTRIAL ARTS; *AEROSPACE TECHNOLOGY; SECONDARY GRADES; TEACHER EDUCATION; STUDENT PROJECTS; REFERENCE MATERIALS; *AEROSPACE INDUSTRY; AUDIOVISUAL AIDS; CONFERENCES
IDENTIFIERS - A SPACE TECHNOLOGY CONFERENCE FOR INDUSTRIAL ARTS EDUCATORS, INDIAN HARBOUR BEACH, FLORIDA, MAY 3-6, 1966

ABSTRACT - THIS RESOURCE GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS, SUPERVISORS, AND TEACHER EDUCATORS. IT WAS PREPARED BY A REPRESENTATIVE COMMITTEE OF EDUCATIONAL LEADERS FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA). THE PURPOSE IS TO PROVIDE TEACHERS WITH SPECIFIC SUGGESTIONS ON WAYS AND MEANS THAT SPACE RELATED CONTENT ELEMENTS MAY BE FUSED INTO INDUSTRIAL ARTS COURSES; SOME IDEAS ARE IN THE FORM OF UNITS AND SOME ARE STUDENT ACTIVITIES. UNIT TITLES ARE: (1) THE AEROSPACE INDUSTRY--AN OVERVIEW, (2) PRODUCTS AND MATERIALS, (3) AEROSPACE OCCUPATIONS, (4) DESIGN AND DRAFTING, (5) METALS, (6) ELECTRICITY-ELECTRONICS, (7) POWER (8) GRAPHIC ARTS, (9) PLASTICS, (10) CERAMICS, (11) WOODS, AND (12) NEW DIRECTIONS. EACH UNIT HAS A BIBLIOGRAPHY OF NASA TECHNICAL BRIEFS, NASA SPECIAL PUBLICATIONS, AND REPRESENTATIVE COMMERCIAL TEXTBOOKS. REFERENCES ARE CODED BY UNIT AND TYPE. PHOTOGRAPHS, LINE DRAWINGS, PROCEDURE LISTS, AND MATERIAL LISTS ACCOMPANY MOST PROJECTS. THE NASA EDUCATIONAL PROGRAMS DIVISION'S SERVICES, A FILM LIST, AND A CONFERENCE PROGRAM AND PARTICIPANT LIST FOR "A SPACE TECHNOLOGY CONFERENCE FOR INDUSTRIAL ARTS EDUCATORS" ARE APPENDED. (EM)

VT 008 270
HANDBOOK FOR INDUSTRIAL ARTS EDUCATION.

MISSOURI STATE DEPT. OF EDUCATION, JEFFERSON CITY
PUB DATE - 69 91P.

DESCRIPTORS - *PROGRAM GUIDES; *INDUSTRIAL ARTS; *INDUSTRIAL ARTS TEACHERS; ELEMENTARY GRADES; SECONDARY GRADES; TEACHER EDUCATION
IDENTIFIERS - MISSOURI

ABSTRACT - THIS HANDBOOK IS FOR USE BY TEACHERS, PROFESSORS, AND ADMINISTRATORS OF INDUSTRIAL ARTS PROGRAMS. IT WAS DEVELOPED BY A COMMITTEE WITHIN THE MISSOURI COUNCIL FOR INDUSTRIAL ARTS EDUCATION. MAJOR PARTS ARE TITLED: (1) INTRODUCTION TO INDUSTRIAL ARTS EDUCATION, (2) THE INDUSTRIAL ARTS CURRICULUM, (3) IMPLEMENTING THE CURRICULUM, (4) PROFESSIONAL GROWTH, AND (5) INDUSTRIAL ARTS HISTORY, TEACHER EDUCATION, AND CERTIFICATION. THE PRIMARY FOCUS IS ON ELEMENTARY AND SECONDARY INDUSTRIAL ARTS; HOWEVER, THERE IS CONSIDERABLE MATERIAL ON COLLEGE PROGRAMS, TEACHER CERTIFICATION, AND PROFESSIONAL ASSOCIATIONS. A GLOSSARY, ORGANIZATIONAL CHARTS, SAMPLE FORMS, EQUIPMENT DEPRECIATION INFORMATION, SCHOOL SHOP SAFETY INSPECTION LIST, AND STUDENT PROGRESS CHART ARE APPENDED. (EM)

VT 008 328
SUGGESTED RELATED INFORMATION FOR THE METAL AREA. INDUSTRIAL ARTS COMPREHENSIVE GENERAL SHOP COURSE.

STATE UNIV. OF NEW YORK, ALBANY. BUREAU OF INDUSTRIAL ARTS EDUCATION
PUB DATE - 61 156P.

DESCRIPTORS - *STUDY GUIDES; *INDUSTRIAL ARTS; *INDUSTRIAL ARTS TEACHERS; TEACHER EDUCATION
IDENTIFIERS - *RELATED INSTRUCTION

ABSTRACT - THIS STUDY GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS DURING A COURSE ON THE ROLE OF RELATED INSTRUCTION IN JUNIOR HIGH SCHOOL GENERAL SHOPS. EACH OF THE 68 LESSON GUIDES INCLUDES AN INTRODUCTION, OBJECTIVES, REFERENCES, ASSIGNMENTS, AND TEST ITEMS. SOME OF THE LESSONS ARE: (1) PLANNING, (2) SOCIAL ECONOMICS, (3) GUIDANCE, (4) SCIENCE, (5) SAFETY AND HYGIENE, AND (6) CONSUMER VALUES. THIS IS AN EDITED REPRINT OF THE 1949 EDITION. (EM)

VT 008 381
INDUSTRIAL ARTS. DRAFTING GUIDE .

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKENCITY, UTAH 84111 ($1.00).
PUB DATE - 66 57P.

DESCRIPTORS - *DRAFTING; STATE CURRICULUM GUIDES; INDUSTRIAL ARTS; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF A SERIES OF RELATED GUIDES WHICH WERE DEVELOPED

BY A CURRICULUM COMMITTEE UNDER THE LEADERSHIP OF THE STATE SPECIALIST IN INDUSTRIAL ARTS. IT IS FOR USE BY DRAFTING TEACHERS AND OTHER SCHOOL PERSONNEL CONCERNED WITH DRAFTING COURSES. MAJOR SECTIONS COVER (1) BASIC DRAWING, SKETCHING, AND PLANNING, (2) BASIC MACHINE DRAWING, AND (3) TECHNICAL DRAFTING I, II, III, AND IV. FOR EACH OF THESE OBJECTIVES, AN INSTRUCTIONAL PLAN, CONTENT OUTLINE, AND SUGGESTED ASSIGNMENTS ARE GIVEN. RELATED DOCUMENTS ARE VT 008 382-VT 008 385. (EM)

VT 008 382
INDUSTRIAL ARTS. METALS .

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKENCITY, UTAH 84111 ($1.00).
PUB DATE - 66 66P.

DESCRIPTORS - STATE CURRICULUM GUIDES; INDUSTRIAL ARTS; *METALS; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF A SERIES OF RELATED GUIDES WHICH WERE DEVELOPED BY A CURRICULUM COMMITTEE UNDER THE LEADERSHIP OF THE STATE SPECIALIST IN INDUSTRIAL ARTS. IT IS FOR USE BY METALS TEACHERS AND OTHER SCHOOL PERSONNEL CONCERNED WITH METALS COURSES IN GRADE 8-12. MAJOR SECTIONS COVER EXPLORATORY METALS (12 WEEKS), INTRODUCTORY METALS (18 WEEKS), GENERAL METALS (36 WEEKS), OXY-ACETYLENE WELDING (18 WEEKS), AND ARC WELDING (18 WEEKS). FOR EACH OF THESE AN INSTRUCTIONAL PLAN AND SAMPLE TEACHING GUIDE, STUDY GUIDE, AND PROCEDURE GUIDE ARE GIVEN. RELATED DOCUMENTS ARE VT 008 381-VT 008 385. (EM)

VT 008 383
INDUSTRIAL ARTS. AUTOMOTIVE MECHANICS GUIDE .

UTAH STATE BOARD FOR VCCATIONAL ECUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKENCITY, UTAH 84111 ($1.00).
PUB DATE - 66 70P.

DESCRIPTORS - STATE CURRICULUM GUIDES; INDUSTRIAL ARTS; *AUTO MECHANICS; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF A SERIES OF RELATED GUIDES WHICH WERE DEVELOPED BY A CURRICULUM COMMITTEE UNDER THE LEADERSHIP OF THE STATE SPECIALIST IN INDUSTRIAL ARTS. IT IS FOR USE BY AUTO MECHANICS, TEACHERS AND OTHER SCHOOL PERSONNEL CONCERNED WITH AUTO MECHANICS COURSES. COURSE UNITS INCLUDE (1) THE AUTOMOBILE, (2) COMMON TOOLS, (3) FASTENING DEVICES, (4) MEASURING INSTRUMENTS, (5) SAFETY, (6) TIRES, (7) LUBRICATION, (8) ENGINES, (9) COOLING DEVICES, (10) FUEL SYSTEMS, (11) ELECTRICAL SYSTEMS, (12) HYDRAULICS AND PNEUMATICS, (13) BRAKES, (14) STEERING, (15) SPRINGS AND SUSPENSIONS, (16) POWER TRAIN, (17) AIR CONDITIONING, AND (18) BODY. A TOPICAL OUTLINE IS PROVIDED FOR THESE UNITS. SUPPLEMENTARY MATERIALS INCLUDE TEXT, FILM, AND TOOL LISTS. RELATED DOCUMENTS ARE VT 008 381-VT 008 385. (EM)

VT 008 384
INDUSTRIAL ARTS. WOODS .

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKENCITY, UTAH 84111 ($1.00).
PUB DATE - 66 59P.

DESCRIPTORS - STATE CURRICULUM GUIDES; INDUSTRIAL ARTS; *WOODWORKING; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF A SERIES OF RELATED GUIDES WHICH WERE DEVELOPED BY A CURRICULUM COMMITTEE UNDER THE LEADERSHIP OF THE STATE SPECIALIST IN INDUSTRIAL ARTS. IT IS FOR USE BY WOODWORKING TEACHERS AND OTHER SCHOOL PERSONNEL CONCERNED WITH WOODWORKING COURSES. MAJOR SECTIONS COVER (1) AN INTRODUCTION TO THE WOODS INDUSTRY (12 WEEKS), (2) EXPLORATORY WOODS (18 WEEKS), (3) GENERAL WOODS (36 WEEKS), (4) ADVANCED WOODS (36 WEEKS), AND (5) WOOD SCIENCE AND TECHNOLOGY (36 WEEKS). SAMPLE TEACHING GUIDES, STUDY GUIDES, AND PROCEDURE GUIDES ARE PROVIDED FOR EACH COURSE. SUPPLEMENTARY MATERIALS INCLUDE TEACHING AIDS, FILM, TRANSPARENCY, AND EQUIPMENT LISTS. RELATED DOCUMENTS ARE VT 008 381-VT 008 385. (EM)

VT 008 385
INDUSTRIAL ARTS. PLASTICS .

UTAH STATE BOARD FOR VOCATIONAL EDUCATION, SALT LAKE CITY
UTAH STATE BOARD FOR VOCATIONAL EDUCATION, 1300 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE, SALT LAKE CITY, UTAH 84111 ($1.00).
PUB DATE - 66 29P.

DESCRIPTORS - STATE CURRICULUM GUIDES; INDUSTRIAL ARTS; *PLASTICS; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS ONE OF A SERIES OF RELATED GUIDES WHICH WERE DEVELOPED BY A CURRICULUM COMMITTEE UNDER THE LEADERSHIP OF THE STATE SPECIALIST IN INDUSTRIAL ARTS. IT IS FOR USE BY DRAFTING TEACHERS AND OTHER SCHOOL PERSONNEL CONCERNED WITH DRAFTING COURSES. INCLUDED ARE COURSE OUTLINES FOR A 9-WEEK, AN 18-WEEK, AND A 36-WEEK COURSE IN INDUSTRIAL PLASTICS. SAMPLE TEACHING GUIDES, PROCEDURE GUIDES, AND STUDY GUIDES ARE INCLUDED. SUPPLEMENTARY MATERIALS INCLUDE LISTS OF EQUIPMENT SOURCES AND FILMS. RELATED DOCUMENTS ARE VT 008 381-VT 008 384. (EM)

VT 008 407
STEEB, RALPH
ELEMENTARY SCHOOL INDUSTRIAL ARTS .

FLORICA STATE DEPT. OF EDUCATION, TALLAHASSEE
PUB DATE - 67 18P.

DESCRIPTORS - *PROGRAM DESCRIPTIONS; CURRICULUM ENRICHMENT; *INDUSTRIAL ARTS; *ELEMENTARY SCHOOL CURRICULUM; *ELEMENTARY GRADES; BIBLIOGRAPHIES; *STATE PROGRAMS
IDENTIFIERS - *FLORIDA

ABSTRACT - ELEMENTARY INDUSTRIAL ARTS IS CONCERNED WITH ALL THE EXPERIENCES CHILDREN HAVE WITH MATERIALS AND TOOLS AND THE LEARNING AND SATISFACTION WHICH RESULT FROM THESE EXPERIENCES. PLANNED ACTIVITIES AND EXPERIENCES INCLUDE THE CONSTRUCTION OF PROJECTS RELATED TO AND REINFORCING OTHER SUBJECTS AND OF PROJECTS RELATED TO RECREATIONAL AND PERSONAL PURPOSES AND A STUDY OF INDUSTRY WITH EMPHASIS ON ITS ORGANIZATION, MATERIALS, PROCESSES, OCCUPATIONS, PRODUCTS, AND PROBLEMS AND THEIR EFFECT ON MAN'S CULTURE. IN GRADES K-3 THESE ACTIVITIES SHOULD BE TAUGHT BY THE ELEMENTARY TEACHER IN HER SELF-CONTAINED CLASSROOM, WHILE IN GRADES 4-6 A SEPARATE TEACHER AND CLASSROOM IS MORE SUITABLE. BOTH SEXES MAY BENEFIT BY PARTICIPATION IN THE ACTIVITIES OF SUCH PROGRAMS. PROJECT CONSTRUCTION IS A TYPICAL ACTIVITY INVOLVING SEASONAL, PERSONAL AND ACADEMICALLY-RELATED PROJECTS. SUGGESTIONS FOR ORGANIZING AND EQUIPPING ELEMENTARY INDUSTRIAL ARTS PROGRAMS ARE INCLUDED. (EM)

VT 008 465
TWENTY-EIGHT INDUSTRIAL ARTS FILMS FROM MCGRAW-HILLL.

MCGRAW-HILL BOOK CO., NEW YORK, N.Y. TEXT-FILM DIV.
E
PUB DATE - ND 8P

DESCRIPTORS - .*ANNOTATED BIBLIOGRAPHIES; *INDUSTRIAL ARTS; *DRAFTING; *WOODWORKING; *INSTRUCTIONAL FILM

ABSTRACT - EIGHTEEN BLACK AND WHITE 16MM EDUCATIONAL FILMS WHICH ARE CORRELATED WITH TWO TEXTBOOKS ARE ANNOTATED. THE TEXTS ARE "MECHANICAL DRAWING" BY FRENCH AND SVENSEN AND "ENGINEERING DRAWING" BY FRENCH AND VIERCK. TEN OTHER FILMS ARE LISTED FOR WOODWORKING, SHOP SAFETY, AND HAND TOOLS. PRICE, RUNNING TIME, AND ORDER NUMBER ARE INCLUDED. (EM)

VT 008 537
VOCATIONAL INDUSTRIAL DRAFTING. A TEACHER'S OUTLINE FOR USE IN ORGANIZATION AND MANAGEMENT OF INSTRUCTION.

MISSISSIPPI STATE DEPT. OF EDUCATION, JACKSON. CURRICULUM LAB.
CURRICULUM LABORATORY, BOX NU, STATE COLLEGE, MISSISSIPPI 39762 ($1.50).
PUB DATE - APR69 87P.

DESCRIPTORS - *CURRICULUM GUIDES; *TRADE AND INDUSTRIAL EDUCATION; *DRAFTSMEN; GRADE 11; GRADE 12

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY TEACHERS OF VOCATIONAL DRAFTING COURSES. IT WAS DEVELOPED BY A COMMITTEE OF SECONDARY TEACHERS AND EDITED BY THE STAFF OF A CURRICULUM MATERIALS LABORATORY. OUTLINES ARE PROVIDED FOR (1) FUNDAMENTALS OF DRAFTING, (2) SHEET METAL DRAFTING, (3) DRAFTING MEDIA AND REPRODUCTION, (4) MACHINE DRAFTING, (5) ARCHITECTURAL DRAFTING, (6) TOPOGRAPHICAL DRAFTING AND (7) STRUCTURAL DRAFTING. SUPPLEMENTARY MATERIALS INCLUDE SAMPLE INSTRUCTIONAL SHEETS AND INFORMATION ABOUT THE SURVEY ON WHICH THIS GUIDE IS BASED. TEACHERS SHOULD BE CERTIFIED VOCATIONAL TEACHERS AND STUDENTS SHOULD HAVE AN EXPRESSED INTEREST IN DRAFTING AS A VOCATION. (EM)

VT 008 562 ED 033 195
MITCHELL, E.F., AND OTHERS
INDUSTRIAL ARTS AND VOCATIONAL EDUCATION IN GRADES K-12. FINAL REPORT.

LEFLORE COUNTY SCHOOLS, GREENWOOD, MISS.
PUB DATE - OCT68 99P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; SECONDARY SCHOOLS; ELEMENTARY GRADES; *VOCATIONAL EDUCATION; PROGRAM DEVELOPMENT; COMPREHENSIVE PROGRAMS
IDENTIFIERS - LEFLORE COUNTY MISSISSIPPI SCHOOLS; GREENWOOD; MISSISSIPPI

ABSTRACT - THIS CURRICULUM GUIDE, ENCOMPASSING A TOTAL INDUSTRIAL ARTS AND VOCATIONAL PROGRAM FOR GRADES K-12 FOR THE LEFLORE COUNTY SCHOOLS, GREENWOOD, MISSISSIPPI, WAS DEVELOPED BY A LOCAL STAFF OF EDUCATORS. SPECIAL EMPHASIS IS GIVEN TO INDUSTRIAL ARTS IN GRADES K-6, VOCATIONAL ORIENTATION IN THE SEVENTH GRADE, INTRODUCTION TO MODERN INDUSTRY IN THE NINTH GRADE, AND VOCATIONAL PART-TIME COOPERATIVE EDUCATION IN THE 12TH GRADE. MAJOR DIVISIONS INCLUDE: (1) INTRODUCTION, (2) ELEMENTARY INDUSTRIAL ARTS (K-6), (3) JUNIOR HIGH SCHOOL INDUSTRIAL ARTS, (4) INDUSTRIAL ARTS AND VOCATIONAL EDUCATION IN HIGH SCHOOLS, AND (5) SUMMARY AND RECOMMENDATIONS. APPENDED MATERIALS INCLUDE A PILOT PROPOSAL FOR ELEMENTARY SCHOOL, COURSE DESCRIPTIONS AND OUTLINES FOR ELEMENTARY SCHOOL INDUSTRIAL ARTS, AND A REPORT ON "INTERPRETATION OF MODERN INDUSTRY." (GR)

VT 008 664
A GUIDE TO BETTER TEACHING.

MAINE STATE DEPT. OF EDUCATION, AUGUSTA. DIV. OF VOCATIONAL EDUCATION
PUB DATE - ND 39P.

DESCRIPTORS - *RESOURCE MATERIALS; INDUSTRIAL ARTS; *INDUSTRIAL ARTS TEACHERS; *CLASSROOM TECHNIQUES; *TEACHING METHODS; *CLASS MANAGEMENT; SECONDARY GRADES
IDENTIFIERS - MAINE

ABSTRACT - THE GUIDE, FOR USE BY BEGINNING INDUSTRIAL ARTS TEACHERS, DESCRIBES THE ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL ARTS PROGRAMS. MAJOR SECTIONS ARE: (1) CLASS ADMINISTRATION, (2) PUPIL PERSONNEL ORGANIZATION, (3) SHOP RECORDS, (4) CURRICULUM MATERIALS, AND (5) TEACHING PROCEDURES AND TECHNIQUES. CHECK LISTS,

PROCEDURES, FORMS, AND BRIEF DISCUSSIONS ARE INCLUDED FOR THESE TOPICS. (EM)

VT 008 733
DUFFY, JOSEPH W.
POWER: PRIME MOVER OF TECHNOLOGY. LABORATORY MANUAL.

MCNIGHT AND MCNIGHT PUBLISHING CO., ROUTE 66 AND TOWANDA AVENUE, BLOOMINGTON, ILLINOIS 61701.
PUB DATE - 65 144P.

DESCRIPTORS - *LABORATORY MANUALS; *INDUSTRIAL ARTS; *STUDENT PROJECTS; *LABORATORY EXPERIMENTS; INDIVIDUALIZED INSTRUCTION; *POWER MECHANICS; INDUSTRIAL TECHNOLOGY; SECONDARY GRADES; ENGINES; ELECTRIC MOTORS; ENERGY

ABSTRACT - COMPILED BY AN ASSOCIATE PROFESSOR OF INDUSTRIAL ARTS, THIS LABORATORY MANUAL IS FOR USE BY HIGH SCHOOL INDUSTRIAL ARTS STUDENTS ENGAGED IN A STUDY OF POWER AND ITS ROLE IN TECHNOLOGY. IT IS DIVIDED INTO TWO MAJOR SECTIONS, THE FIRST OF WHICH IS A GROUP OF 20 STUDY UNITS KEYED TO THE CHAPTERS OF THE TEXTBOOK, "POWER--THE PRIME MOVER OF TECHNOLOGY." THE SECOND SECTION IS COMPRISED OF 22 ACTIVITIES AND PERFORMANCE PROBLEMS RELATING TO THE INFORMATION COVERED IN PART ONE. THE CONTENTS OF BOTH SECTIONS ARE GROUPED UNDER THE MAJOR TOPICS: (1) DIRECT MANUAL CONVERTERS, (2) EXTERNAL COMBUSTION CONVERTERS, (3) INTERNAL COMBUSTION CONVERTERS, (4) CONVENTIONAL ELECTRICAL CONVERTERS, AND (5) DIRECT ELECTRICAL CONVERTERS. PERFORATED PAGES MAKE THE STUDY UNITS EASILY DETACHABLE SO THAT THEY MAY BE TURNED IN TO THE INSTRUCTOR OR INCLUDED IN STUDENT REFERENCE NOTEBOOKS. THE PROBLEM SECTION PROVIDES FOR ACTIVITIES IN EXPERIMENTATION, MODEL PREPARATION, AND DESIGN AND CONSTRUCTION OF POWER CONVERTERS. STUDENTS SHOULD SELECT AND UTILIZE THESE ACCORDING TO THEIR OWN INTERESTS AND ABILITIES. SUPPLEMENTARY MATERIALS INCLUDE TABLES OF DECIMAL EQUIVALENTS, TRIGONOMETRIC FUNCTIONS, PERIODIC TABLE OF CHEMICAL ELEMENTS, LIST OF CHEMICAL ELEMENTS AND SYMBOLS, AND SELECTED REFERENCES FOR EACH MAJOR TOPIC. THE RELATED TEACHER'S MANUAL IS AVAILABLE AS VT 008 734, IN THIS ISSUE. (AW)

VT 008 734
DUFFY, JOSEPH W.
POWER: PRIME MOVER OF TECHNOLOGY. TEACHER'S MANUAL.

MCNIGHT AND MCNIGHT PUBLISHING CO., ROUTE 66 AND TOWANDA AVENUE, BLOOMINGTON, ILLINOIS 61701.
PUB DATE - 65 141P.

DESCRIPTORS - *CURRICULUM GUIDES; *COURSE ORGANIZATION; *INDUSTRIAL ARTS; INDUSTRIAL TECHNOLOGY; SECONDARY GRADES; STUDENT PROJECTS; INDIVIDUALIZED INSTRUCTION; *POWER MECHANICS; ENERGY

ABSTRACT - THIS TEACHER'S MANUAL IS DESIGNED TO AID THE HIGH SCHOOL INDUSTRIAL ARTS TEACHER IN ORGANIZING AND IMPLEMENTING A COURSE IN POWER TECHNOLOGY. WRITTEN BY AN ASSOCIATE PROFESSOR OF INDUSTRIAL ARTS, THE MANUAL PROVIDES A SUGGESTED COURSE OUTLINE AND SHOP LAYOUT, AS WELL AS A COMPILATION OF SCIENTIFIC AND TECHNOLOGICAL INFORMATION TO BE USED SELECTIVELY BY THE INSTRUCTOR TO MEET THE NEEDS AND ABILITIES OF THE CLASS AND THE INDIVIDUAL STUDENTS. GENERAL OBJECTIVES OF THE COURSE ARE TO ACQUAINT STUDENTS WITH (1) BASIC SCIENTIFIC PRINCIPLES OF POWER, (2) INDUSTRIAL USES OF POWER, (3) CONVERSION OF ENERGY FROM ONE FORM TO ANOTHER, (4) SOCIO-ECONOMIC IMPLICATIONS OF POWER TECHNOLOGY, (5) RELATED INDUSTRIAL AND OCCUPATIONAL AREAS, AND (6) RELATED PRINCIPLES IN MATHEMATICS AND SCIENCE. UNITS ARE PRESENTED ON: (1) MACHINES, (2) HEAT AS A FORM OF ENERGY, (3) STEAM AND HEAT ENGINES, (4) INTERNAL COMBUSTION AND HEAT ENGINES, (5) GAS TURBINES AND THRUST, (6) ROCKETS, (7) ELECTRICITY, (8) MAGNETISM, AND (9) ALTERNATING CURRENT. SECTIONS ON FACILITIES, INCLUDING EQUIPMENT AND MACHINERY, AND AUDIO-VISUAL MATERIALS ARE ALSO INCLUDED. THE MANUAL IS ILLUSTRATED WITH PHOTOGRAPHS, CHARTS, GRAPHS, AND DIAGRAMS. THE RELATED STUDENT LABORATORY MANUAL IS AVAILABLE AS VT 008 733 (IN THIS ISSUE). (AW)

VT 008 796
ORGANIZATION AND ADMINISTRATION FORMS FOR INDUSTRIAL ARTS.

INSTRUCTIONAL MATERIALS SERVICE, KENNEDY, MINN.
IMS-SERIES 1000
INSTRUCTIONAL MATERIALS SERVICE, P.O. BOX 244, KENNEDY, MINNESOTA 56733.
PUB DATE - ND 34P.

DESCRIPTORS - *INDUSTRIAL ARTS; *RECORDS (FORMS); *SECONDARY SCHOOLS; *PROGRAM ADMINISTRATION; ORGANIZATION

ABSTRACT - THIS SERIES OF ORGANIZATION AND ADMINISTRATION FORMS ARE DESIGNED FOR USE IN JUNIOR AND SENIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAMS, AND IN COURSES IN ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL ARTS AT THE TEACHER EDUCATION LEVEL. SAMPLES OF 25 DIFFERENT FORMS ARE SHOWN, AND AN ORDER FORM AND PRICE LIST ARE INCLUDED. (GR)

VT 008 872
INDUSTRIAL ARTS CURRICULUM GUIDE: INDUSTRIAL ARTS, 1968-1969.

ORANGE COUNTY SCHOOL BOARD, ORLANDO, FLA.
FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE
PUB DATE - 69 109P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; JUNIOR HIGH SCHOOLS; *COMMUNICATIONS; *MANUFACTURING; *POWER MECHANICS; COURSE CONTENT; COURSE ORGANIZATION; LEARNING ACTIVITIES; INSTRUCTIONAL AIDS; EDUCATIONAL FACILITIES; EDUCATIONAL EQUIPMENT

ABSTRACT - CONTENT FOR THE JUNIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAM PRESENTED IN THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE OF TEACHERS, STATE SUPERVISORS, AND CONSULTANTS THROUGH AN ANALYSIS OF THE

MANUFACTURING, CONSTRUCTION, COMMUNICATION, TRANSPORTATION, POWER, SERVICE, RESEARCH, AND MANAGEMENT CATEGORIES OF AMERICAN INDUSTRY. A ONE SEMESTER COURSE IN COMMUNICATIONS INTRODUCES THE 7TH GRADE STUDENT TO THE WAYS AND MEANS BY WHICH MAN HAS EMPLOYED AND DEVELOPED TECHNOLOGY TO AID HIM IN BETTER COMMUNICATION OF IDEAS AND INFORMATION. THE ONE SEMESTER 8TH GRADE COURSE IN MANUFACTURING INTRODUCES THE STUDENT TO THE WAYS AND MEANS BY WHICH MAN OBTAINS AND CHANGES THE NATURAL RESOURCES TO PRODUCE HIS MATERIAL WELFARE. THE 9TH GRADE FULL YEAR COURSE OF STUDY IN POWER MECHANICS IS DESIGNED TO INTRODUCE THE STUDENT TO MAN'S USE OF ENERGY TO PRODUCE POWER TO MAKE HIS WORK EASIER AND TO MOVE HIMSELF AND THE THINGS HE PRODUCES. COURSE CONTENT TOPIC TITLES OUTLINED UNDER THE HEADINGS OF INFORMATION TOPICS ARE INTENDED TO IDENTIFY LESSONS OR UNITS OF INSTRUCTION TO BE PREPARED AND PRESENTED. OTHER OUTLINE COLUMNS TITLED STUDENT ACTIVITY, TEACHER NOTES, AND INSTRUCTIONAL AIDS PRESENT INFORMATION HELPFUL IN PREPARING LESSON PLANS. EACH COURSE OF STUDY INCLUDES A SUGGESTED QUALITY FLOORPLAN AND A LIST OF EDUCATIONAL SUPPLIES AND EQUIPMENT. (HC)

VT 008 993
WOODWORKING: VOCATIONAL-INDUSTRIAL EDUCATION CURRICULUM GUIDE.

DALLAS INDEPENDENT SCHOOL DISTRICT, TEXAS
DALLAS INDEPENDENT SCHOOL DISTRICT, 3700 ROSS AVENUE, DALLAS, TEXAS 75204 ($2.72).
PUB DATE - 67 82P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; *SECONDARY GRADES; CURRICULUM PLANNING

ABSTRACT - DEVELOPED BY A TEACHER CURRICULUM SPECIALIST AND TESTED FOR 1-YEAR IN MONOGRAPH FORM BEFORE PUBLICATION, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN PLANNING A WOODWORKING CLUSTER FOR THE SENIOR AND JUNIOR HIGH SCHOOL LEVEL. THE CONTENT IS COMPRISED OF SIX MODEL WOODWORKING COURSES COVERING GRADES 7 THROUGH 12. IN THE FIRST TWO, THE PRIMARY OBJECTIVES ARE TO HELP STUDENTS DETERMINE WHETHER OR NOT THEIR APTITUDES AND INTERESTS LIE IN WOODWORKING AND TO ACQUAINT THEM WITH BASIC WOODWORKING SKILLS. THE LAST FOUR UNITS, ON THE HIGH SCHOOL LEVEL, ARE DESIGNED TO ASSIST THE STUDENT IN ACQUIRING THE TECHNICAL KNOWLEDGE, EXPERIENCE, AND SKILLS NECESSARY FOR A CAREER IN WOODWORKING. EACH UNIT CONTAINS BRIEF DESCRIPTIVE INFORMATION, COURSE OBJECTIVES, SUGGESTED LEARNING EXPERIENCES AND TEACHING METHODS, AND SELECTED REFERENCES AND AUDIO-VISUAL AIDS. THE BULLETIN IS ILLUSTRATED WITH PHOTOGRAPHS. (AW)

VT 009 072 ED 031 594
GEBHART, RICHARD H.
DEVELOPING AMERICAN INDUSTRY COURSES FOR THE SECONDARY SCHOOL.

STOUT STATE UNIV., MENOMONIE, WIS.
OEC-5-85-060 08
BR-5-0058
AMERICAN INDUSTRY PROJECT, STOUT STATE UNIVERSITY, MENOMONIE, WISCONSIN 54751 (SINGLE COPIES NO CHARGE).
PUB DATE - MAR68 33P.

DESCRIPTORS - *INDUSTRIAL ARTS; *HIGH SCHOOL CURRICULUM; *CONCEPTUAL SCHEMES; *PROGRAM DESCRIPTIONS; INDUSTRY; *CURRICULUM DEVELOPMENT; COURSE DESCRIPTIONS; TEACHING GUIDES; MODELS; ILLUSTRATIONS; EDUCATIONAL INNOVATION; MATERIAL DEVELOPMENT; INSTRUCTIONAL MATERIALS; PROGRAM DEVELOPMENT; PROGRAM DESIGN
IDENTIFIERS - *PROJECT AMERICAN INDUSTRY

ABSTRACT - THE CONSTRUCTION OF A CONCEPTUAL FRAMEWORK OF INDUSTRY IN THE UNITED STATES AND THE DEVELOPMENT O F A COMPLETELY NEW SECONDARY CURRICULUM, CALLED AMERICAN INDUSTRY, ARE REPORTED. MAJOR EMPHASIS IS PLACED ON THE NEED OF THE SECONDARY SCHOOL TO AID ALL PEOPLE IN DEVELOPING AN UNDERSTANDING OF AMERICAN INDUSTRY, THE PROCEDURE USED IN IDENTIFYING THOSE KNOWLEDGES NECESSARY TO UNDERSTAND AMERICAN INDUSTRY, THE SPECIFICATION OF BEHAVIORAL OBJECTIVES, THE DEVELOPMENT OF A LOGICAL COURSE SEQUENCE, AND THE DEVELOPMENT OF INSTRUCTIONAL MATERIALS FOR TEACHER AND STUDENT. THE PROJECT FORMALLY DEFINED AMERICAN INDUSTRY AS "AN INSTITUTION IN OUR SOCIETY WHICH, INTENDING TO MAKE A MONETARY PROFIT, APPLIES KNOWLEDGE AND UTILIZES HUMAN AND NATURAL RESOURCES TO PRODUCE GOODS OR SERVICES TO MEET THE NEEDS OF MAN." MODELS AND ILLUSTRATIONS ACCOMPANY THE NARRATIVE DESCRIPTION OF THE DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK, THE CURRICULUM MATERIALS, AND THE GENERAL OPERATING CHARACTERISTICS OF THE COURSE. (CH)

VT 009 081
BARRON, LAWRENCE, AND OTHERS
A SUGGESTED GUIDE FOR TEACHING SLOW LEARNERS IN INDUSTRIAL ARTS IN THE PUBLIC SCHOOLS.

MAINE STATE DEPT. OF EDUCATION, AUGUSTA
STATE DEPARTMENT OF EDUCATION, BUREAU OF VOCATIONAL EDUCATION, EDUCATION BUILDING, AUGUSTA, MAINE 04330 (NO CHARGE).
PUB DATE - SEP66 42P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL EDUCATION; *LOW ABILITY STUDENTS; *SLOW LEARNERS; SECONDARY GRADES; OCCUPATIONAL CLUSTERS; *JOB SKILLS; BUILDING TRADES; AUTO MECHANICS; MANUFACTURING INDUSTRY; WELDERS

ABSTRACT - DEVELOPED THROUGH A WORKSHOP OF HIGH SCHOOL INDUSTRIAL ARTS INSTRUCTORS AND EDUCATIONAL ADMINISTRATORS, THIS GUIDE IS DESIGNED TO AID HIGH SCHOOL INDUSTRIAL ARTS TEACHERS IN CONDUCTING SPECIAL OCCUPATIONAL CLASSES FOR SLOW LEARNERS. THE MATERIAL IS RECOMMENDED FOR USE WITH SMALL CLASSES OF MALE STUDENTS WITH I.Q.'S RANGING FROM 75-90. THE CONTENT INCLUDES SUGGESTIONS FOR TEACHERS, A STATEMENT OF OBJECTIVES, AND TOPICAL OUTLINES OF A VARIETY OF OCCUPATIONAL SKILLS TO BE TAUGHT FROM GRADES 7 THROUGH 12. OCCUPATIONS OUTLINED ARE: (1) PRODUCTION OF HOME ACCESSORIES (GRADE 7), (2) BUILDING REPAIRS AND MAINTENANCE AND SMALL GAS ENGINE SERVICING (GRADE 9, TWO UNITS), (3) INDUSTRIAL MACHINING TECHNIQUES (GRADE 10),

(4) BUILDING TRADES (GRADE 11), AND (5) AUTOMOTIVE SERVICE STATION ATTENDANT (GRADE 12). NO EIGHTH GRADE PROGRAM HAD BEEN DEVELOPED AT TIME OF PUBLICATION. THE MIMEOGRAPHED OUTLINES PROVIDE BRIEF DESCRIPTIVE INFORMATION FOR EACH OCCUPATION, JOBS TO BE PERFORMED, AND ESSENTIAL RELATED INFORMATION. THE SUBJECT MATTER SHOULD BE USED SELECTIVELY TO MEET THE NEEDS OF THE GROUP AND THE INDIVIDUAL STUDENTS. (AW)

VT 009 194
SENIOR HIGH SCHOOL INDUSTRIAL ARTS.

WINSTON-SALEM/FORSYTH COUNTY SCHOOLS, N.C.
WINSTON-SALEM/FORSYTH COUNTY SCHOOLS, P.O. BOX 2513, WINSTON-SALEM, NORTH CAROLINA ($3.00).
PUB DATE - 67 219P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM GUIDES; HIGH SCHOOLS; SECONDARY GRADES; COURSE OBJECTIVES; BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; COURSE ORGANIZATION
IDENTIFIERS - *WINSTON SALEM FORSYTH COUNTY SCHOOLS; NORTH CAROLINA

ABSTRACT - THIS CURRICULUM GUIDE IS FOR TEACHER USE IN COURSE AND LESSON PLANNING FOR HIGH SCHOOL INDUSTRIAL ARTS DRAFTING, HOME PLANNING, HOUSEHOLD MECHANICS, GENERAL SHOP, ELECTRICITY AND ELECTRONICS, METALWORKING, AND MACHINE WOODWORKING. THE TOPICAL OUTLINE WAS DEVELOPED BY A COMMITTEE OF TEACHERS AND SUPERVISORS AT THE LOCAL LEVEL AFTER A 2-YEAR STUDY OF THE CURRICULUM. THE CONTENT OBJECTIVES ARE DESIGNED TO IMPROVE THE TOTAL INSTRUCTIONAL PROGRAM AND STILL PROVIDE FLEXIBILITY TO MEET THE NEEDS OF INDIVIDUAL SCHOOLS. THE MATERIAL FOR EACH COURSE IS DESIGNED FOR 180 SCHOOL DAYS OF 55 MINUTE PERIODS WITH THE EXCEPTION OF HOME PLANNING AND HOUSEHOLD MECHANICS WHICH ARE 1-SEMESTER COURSES. EACH COURSE HAS BEEN DIVIDED INTO UNITS OF INSTRUCTION LISTING: (1) COURSE DESCRIPTION, (2) OBJECTIVES, (3) SCOPE OF COURSE, (4) ASSIGNMENTS, (5) BIBLIOGRAPHY OF REFERENCES, AND (6) EQUIPMENT. SUPPLEMENTAL MATERIAL INCLUDES A DEFINITION OF AND OBJECTIVES FOR INDUSTRIAL ARTS. (GR)

VT 009 281
INTERPRETING INDUSTRY THROUGH LINE PRODUCTION.

MAINE STATE DEPT. OF EDUCATION, AUGUSTA. BUREAU OF VOCATIONAL EDUCATION
GORHAM STATE TEACHERS COLL., MAINE. INDUSTRIAL ARTS DEPT.
INDUSTRIAL ARTS EDUCATION, MAINE STATE DEPARTMENT OF EDUCATION, EDUCATION BUILDING, AUGUSTA, MAINE 04330 (NO CHARGE).
PUB DATE - ND 76P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; *JUNIOR HIGH SCHOOLS; *MASS PRODUCTION; STUDENT PROJECTS; BIBLIOGRAPHIES; *INDUSTRY; COURSE OBJECTIVES; INSTRUCTIONAL MATERIALS

ABSTRACT - THIS TEACHING GUIDE, DEVELOPED BY COLLEGE STUDENTS, IS FOR TEACHER USE IN COURSE AND LESSON PLANNING OF LINE PRODUCTION TECHNIQUES FOR GRADES 6 THROUGH 9 AND REQUIRES FIVE 50-MINUTE CLASSES FOR 9 WEEKS OF STUDY. SOME UNITS ARE: (1) OBJECTIVES, (2) DRAWINGS OF PARTS, (3) JIGS AND FIXTURES, (4) PROCEDURE FOR MANUFACTURING PARTS, (5) PROCEDURE FOR ASSEMBLY, (6) BIBLIOGRAPHY, (7) TOOL LIST, (8) MATERIAL AND SUPPLY LIST, (9) TEACHING AIDS OR DEVICES, (10) LIST OF FILMS, (11) LIST OF LESSONS TO BE TAUGHT, (12) SAFETY CHECK LISTS, (13) FINANCIAL REPORT FOR A MODEL COMPANY, AND (14) EVALUATION TECHNIQUES. (GR)

VT 009 288
BROWN, ALBERT, AND OTHERS
A TECHNICAL DRAWING COURSE FOR COLLEGE-PREPARATORY STUDENTS.

INDUSTRIAL ARTS EDUCATION, MAINE STATE DEPARTMENT OF EDUCATION, EDUCATION BUILDING, AUGUSTA, MAINE 04330 (NO CHARGE).
PUB DATE - ND 18P.

DESCRIPTORS - *INDUSTRIAL ARTS; *DRAFTING; *COLLEGE BOUND STUDENTS; CURRICULUM GUIDES; COURSE OBJECTIVES; SENIOR HIGH SCHOOLS; SECONDARY SCHOOL STUDENTS; *TEACHING GUIDES
IDENTIFIERS - MAINE STATE DEPARTMENT OF EDUCATION; AUGUSTA

ABSTRACT - A STATE-LEVEL COMMITTEE OF TEACHERS DEVELOPED THIS GUIDE FOR TEACHER USE IN PLANNING A TECHNICAL DRAWING COURSE FOR COLLEGE PREPARATORY STUDENTS IN INDUSTRIAL ARTS, GRADES 11 AND 12, SO THAT THESE STUDENTS WOULD BE EQUIPPED TO SUCCESSFULLY COMPLETE ENGINEERING COLLEGE WORK. THE CONTENTS ARE ORGANIZED AS FOLLOWS: (1) OBJECTIVES, (2) FREEHAND SKETCHING, (3) ORTHOGRAPHIC PROJECTION, (4) WORKING DRAWINGS, (5) PICTORIAL, (6) DEVELOPMENT AND INTERSECTIONS, AND (7) SUGGESTED TEXTS. EACH UNIT LISTS THE OPERATIONS A PUPIL SHOULD LEARN AND THE INFORMATION HE SHOULD KNOW. THE COURSE IS DESIGNED FOR APPROXIMATELY 5 HOURS PER WEEK FOR 72 WEEKS (2 SCHOOL YEARS). (GR)

VT 009 306
LOUGHRAN, BERNICE P.; BAILEY, ROGER S.
APPLIED DESIGN: PLANNING TO PRODUCTION AND PRINCIPLES AND ELEMENTS. (TWO PARTS).

CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF EDUCATION
CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO
VOCATIONAL EDUCATION PRODUCTIONS, CALIFORNIA STATE POLYTECHNIC COLLEGE, SAN LUIS OBISPO, CALIFORNIA 93401 ($14.50 FOR 2 ILLUSTRATED SCRIPTS AND 2 FILMSTRIPS).
PUB DATE - 68 52P.

DESCRIPTORS - *FILMSTRIPS; *SCRIPTS; *INDUSTRIAL ARTS; *DESIGN CRAFTS; *ART APPRECIATION; SECONDARY GRADES; POST SECONDARY GRADES; ART EDUCATION; TEACHING GUIDES

ABSTRACT - THESE TWO ILLUSTRATED MANUALS AND THEIR COMPANION FILMSTRIPS WERE DEVELOPED BY COLLEGE FACULTY IN COOPERATION WITH HIGH SCHOOL TEACHERS. VOCATIONAL TEACHERS IN HIGH SCHOOL AND JUNIOR COLLEGES MAY USE THESE MATERIALS WITH STUDENTS OF AVERAGE ABILITY

FOR ONE OR TWO CLASS PERIODS OF VIEWING AND DISCUSSION. PRINCIPLES AND ELEMENTS OF GOOD DESIGN ARE PRESENTED IN A 42-FRAME FILMSTRIP COVERING: (1) THE VALUE OF GOOD DESIGN, (2) POOR DESIGN, (3) APPLICATION OF DESIGN PRINCIPALS, (4) ELEMENTS OF ART, (5) IMPROVEMENT THROUGH DESIGN CHANGES, AND (6) GOOD DESIGN GIVES LONG-LASTING PLEASURE. THE 52-FRAME FILMSTRIP DISCUSSING PLANNING TO PRODUCTION INCLUDES: (1) PLANNING A WELL-DESIGNED PROJECT, (2) DESIGNING WOODEN SALAD SERVERS, (3) DESIGNING COFFEE MUGS, (4) DESIGNING METAL CANDLE HOLDERS, AND (5) DESIGNING WOODEN CANDLESTICKS FOR THE LATHE. SUGGESTIONS ARE GIVEN TO THE INSTRUCTOR FOR USE IN CONDUCTING DISCUSSION. ADDITIONAL RESOURCE INFORMATION WOULD BE DESIRABLE WHEN STUDYING THIS UNIT. (DM)

VT 009 316
STRASSER, ED
USING THE ELECTRONIC WOOD WELDER.

CALIFORNIA STATE POLYTECHNIC COLL., SAN LUIS OBISPO. DEPT. OF TECHNICAL ARTS
CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO
VOCATIONAL EDUCATION PRODUCTIONS, CALIFORNIA STATE POLYTECHNIC COLLEGE, SAN LUIS OBISPO, CALIFORNIA 93401 ($5.00 FOR ILLUSTRATED SCRIPT AND FILMSTRIP).
PUB DATE - 65 19P.

DESCRIPTORS - *FILMSTRIPS; *SCRIPTS; *INDUSTRIAL EDUCATION; *WOODWORKING; SECONDARY GRADES; POST SECONDARY GRADES
IDENTIFIERS - *ELECTRONIC WOOD WELDING

ABSTRACT - DEVELOPED BY COLLEGE FACULTY AND HIGH SCHOOL TEACHERS, THIS 64-FRAME COLOR FILMSTRIP AND COMPANION SCRIPT IS FOR USE IN CLASSES OF VOCATIONAL AGRICULTURE IN HIGH SCHOOLS AND JUNIOR COLLEGES. SUBJECT-MATTER SPECIALISTS AND TEACHERS REVIEWED THE 1- TO 2-HOUR UNIT PRIOR TO ITS PUBLICATION. THE CONTENT DISCUSSES THE UTILIZATION OF THE ELECTRONIC WOOD-WELDER IN DRYING GLUE JOINTS: (1) HOW GLUES DRY, (2) DIELECTRIC HEATING, (3) GLUES FOR USE WITH THE WOOD WELDER, (4) ORIENTATION TO THE WOOD WELDER, (5) PREPARING THE WOOD WELDER FOR OPERATION, (6) PREPARING THE GLUE JOINT, (7) WELDING THE GLUE JOINT, (8) CAUSES OF ARCING, (9) SAFETY POINTS, (10) INDUSTRIAL USES, AND (11) BENEFITS OF WOOD WELDING. STUDENTS SHOULD BE OF AVERAGE ABILITY. ADDITIONAL SOURCE INFORMATION IS DESIRABLE WHEN STUDYING THE TOPIC. (EM)

VT 009 658
GUIDELINES FOR ESTABLISHING AND EVALUATING DRAFTING AND DESIGN TECHNOLOGY PROGRAMS.

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. TECHNICAL AND HEALTH OCCUPATIONS EDUCATION SECTION
PUB DATE - JAN68 21P.

DESCRIPTORS - *DRAFTING; *PROGRAM CONTENT; PROGRAM DESCRIPTIONS; *PROGRAM EVALUATION; PROGRAM PLANNING; *PROGRAM GUIDES; VOCATIONAL EDUCATION

ABSTRACT - TO COMMUNICATE TO SCHOOL OFFICIALS, PROGRAM AND FACILITY PLANNERS, AND INSTRUCTORS IN TECHNICAL EDUCATION, THE ESSENTIAL CONCEPTS AND REQUIREMENTS FOR AN EFFECTIVE PROGRAM OF DRAFTING AND DESIGN TECHNOLOGY, THIS GUIDE OUTLINES A PROGRAM DESIGNED TO MEET THE TECHNICIAN ENTRY LEVEL REQUIREMENTS OF INDUSTRY. INCLUDED ARE: (1) OVERVIEW, (2) PURPOSE, (3) OBJECTIVES, (4) GENERAL REQUIREMENTS, (5) ADMISSION REQUIREMENTS, (6) PROGRAM OPERATION, (7) LENGTH OF PROGRAM, (8) CURRICULUM, (9) PHYSICAL FACILITIES AND EQUIPMENT, (10) CLASSROOM EDUCATIONAL SPECIFICATIONS, (11) MATERIALS TESTING EQUIPMENT, (12) FUTURE TRENDS, (13) FACULTY QUALIFICATIONS, (14) GENERAL CRITERIA FOR PROGRAM ESTABLISHMENT, AND (15) OCCUPATIONAL EMPLOYMENT CLUSTER. A BIBLIOGRAPHY IS APPENDED. (GR)

VT 009 674
POWER MECHANICS: VOCATIONAL AND INDUSTRIAL EDUCATION.

DALLAS INDEPENDENT SCHOOL DISTRICT, TEX.
DALLAS INDEPENDENT SCHOOL DISTRICT, 3700 ROSS AVENUE, DALLAS, TEXAS 75204 ($2.73).
PUB DATE - 66 69P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL EDUCATION; *POWER MECHANICS; TEACHING GUIDES; SECONDARY GRADES

ABSTRACT - DEVELOPED BY TEACHERS OF POWER MECHANICS IN CONJUNCTION WITH THE DEPARTMENT OF VOCATIONAL-INDUSTRIAL EDUCATION OF THE DALLAS INDEPENDENT SCHOOL DISTRICT, TEXAS, THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS, COUNSELORS, AND SUPERVISORS IN PLANNING AND IMPLEMENTING COURSES IN POWER MECHANICS FOR GRADES 9-12. INTRODUCTORY INFORMATION ON THE PURPOSES, SCOPE, AND EXPECTED OUTCOME OF EACH UNIT IS FOLLOWED BY BRIEF OUTLINES OF "POWER MECHANICS 1 AND 2" AND "POWER MECHANICS 3 AND 4," WITH EACH OUTLINE COVERING SKILLS AND KNOWLEDGE TO BE DEVELOPED, TEACHING SUGGESTIONS, SUGGESTED PROJECT IDEAS, AND MATERIALS AND RESOURCES. NUMEROUS PHOTOGRAPHS ILLUSTRATE THE MANUAL. RECOMMENDED TIME ALLOTMENT FOR COVERING THE MATERIAL IS 55 MINUTES PER DAY. (AW)

VT 009 704
ROYE, CHARLES W.
ARTS AND CRAFTS FOR K TO 6.

LEFLORE COUNTY SCHOOL DISTRICT, GREENWOOD, MISS.
LEFLORE COUNTY SCHOOLS, HIGHWAY 82 WEST, GREENWOOD, MISSISSIPPI 38930 ($2.00).
PUB DATE - 69 33P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *PREVOCATIONAL EDUCATION; *CURRICULUM PLANNING; ELEMENTARY GRADES
IDENTIFIERS - *ARTS AND CRAFTS

ABSTRACT - INDIVIDUALLY DEVELOPED AND PILOT TESTED WITH APPROXIMATELY 400 STUDENTS, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN PLANNING PREVOCATIONAL COURSES IN ARTS AND CRAFTS FOR GRADES K-6. CONTENT INCLUDES: (1) STATEMENT OF PHILOSOPHY, (2) PURPOSES, (3)

OBJECTIVES OF THE PROGRAM, (4) INFORMATION ON THE TEACHING STAFF AND CONSULTANTS, (5) NECESSARY FACILITIES AND TOOLS, (6) SUGGESTIONS FOR IN-SERVICE TEACHING TRAINING, (7) REFERENCE LIST, AND (8) THE PROPOSED CURRICULUM. THE CURRICULUM SECTION PROVIDES A BASIC OUTLINE OF POSSIBLE PROJECTS AND ACTIVITIES THAT MIGHT BE USED IN EACH GRADE LEVEL FROM K TO 6 FOR THE SUBJECT AREAS OF: (1) HEALTH AND SAFETY, (2) COMMUNICATIVE ARTS, (3) MATHEMATICS, (4) SCIENCE, (5) MUSIC, AND THE ARTS, AND (6) CITIZENSHIP AND SOCIAL STUDIES. THE MATERIAL SHOULD BE USED SELECTIVELY AND ADAPTED TO LOCAL NEEDS BY THE INDIVIDUAL CLASSROOM TEACHER. (AW)

VT 009 706
METALWORKING; VOCATIONAL-INDUSTRIAL EDUCATION CURRICULUM GUIDE. CURRICULUM BULLETIN SERIES.

DALLAS INDEPENDENT SCHOOL DISTRICT, TEX.
DALLAS INDEPENDENT SCHOOL DISTRICT, 3700 ROSS AVENUE, DALLAS, TEXAS 75204 ($2.73).
PUB DATE - 67 110P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL EDUCATION; *METAL WORKING OCCUPATIONS; SECONDARY GRADES; *METALS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY TEACHERS OF METALWORKING IN CONJUNCTION WITH THE DEPARTMENT OF VOCATIONAL-INDUSTRIAL EDUCATION OF THE DALLAS INDEPENDENT SCHOOL DISTRICT, DALLAS, TEXAS, FOR USE BY LOCAL INDUSTRIAL ARTS TEACHERS, SUPERVISORS, AND COUNSELORS IN PLANNING AND IMPLEMENTING COURSES IN METALWORKING FOR GRADES 7-12. CONTENTS INCLUDE SIX UNITS: TWO ON EXPLORATORY METALWORKING FOR GRADES 7 AND 8, AND FOUR ON METALWORKING TO BE TAUGHT AT THE SENIOR HIGH SCHOOL LEVEL. UNITS PROVIDE INTRODUCTORY INFORMATION, SCOPE, EXPECTED OUTCOMES, HOURS PER UNIT, PROJECT IDEAS, BIBLIOGRAPHIES, AND OUTLINES LISTING SKILLS AND KNOWLEDGE TO BE DEVELOPED AND TEACHING SUGGESTIONS. NUMEROUS PHOTOGRAPHS ILLUSTRATE THE GUIDE. THE MATERIAL PRESENTED SHOULD BE USED FLEXIBLY AND ADAPTED BY INDIVIDUAL TEACHERS TO FIT PARTICULAR LEARNING SITUATIONS. (AW)

VT 009 779
INDUSTRIAL TESTING; INDUSTRIAL ARTS TEACHING GUIDE.

CUMBERLAND COUNTY INDUSTRIAL ARTS TEACHERS ASSOCIATION, PA.
PENNSYLVANIA STATE DEPT. OF PUBLIC INSTRUCTION, HARRISBURG. BUREAU OF GENERAL AND ACADEMIC EDUCATION
PENNSYLVANIA STATE DEPARTMENT OF PUBLIC INSTRUCTION, BOX 911, HARRISBURG, PENNSYLVANIA 17126.
PUB DATE - 67 25P.

DESCRIPTORS - *INDUSTRIAL ARTS; *INSTRUCTIONAL MATERIALS; *TEACHING GUIDES; TEACHING TECHNIQUES
IDENTIFIERS - *INDUSTRIAL TESTING

ABSTRACT - THIS TEACHING GUIDE, PREPARED BY A COUNTY ORGANIZATION OF INDUSTRIAL ARTS TEACHERS IS FOR USE IN UPGRADING INDUSTRIAL ARTS OFFERINGS IN MATERIALS TESTING AND CONTAINS THE FOLLOWING OUTLINED MATERIAL: (1) ORGANIZING THE INITIAL INVESTIGATION, INCLUDING TOPICS AND ACTIVITIES RELATING TO PROPERTIES OF MATERIALS, PROCESSES, SELECTING MATERIAL OR PROCESS FOR INVESTIGATION, FORMING TEAMS FOR INVESTIGATION, AND COLLECTING INFORMATION ABOUT MATERIAL OR PROCESS, (2) REPORTING TO CLASS, (3) TESTING METHODS AND EQUIPMENT, (4) ESTABLISHING PROCEDURES OF INQUIRY, AND (5) PRESENTING ORAL REPORTS. REFERENCE LISTS ARE INCLUDED. (GR)

VT 009 867
SAFETY HANDBOOK; A GUIDE FOR INDUSTRIAL ARTS PROGRAMS, AND TRANSPARENCY MASTERS.

CLEMSON UNIV., S.C.
SOUTH CAROLINA STATE DEPT. OF EDUCATION, COLUMBIA. INDUSTRIAL ARTS SECTION
INDUSTRIAL EDUCATION DEPARTMENT, CLEMSON UNIVERSITY, CLEMSON, SOUTH CAROLINA 29631 (LIMIT: ONE PER STATE SUPERVISOR OF INDUSTRIAL EDUCATION).
PUB DATE - 69 78P.

DESCRIPTORS - SAFETY EDUCATION; *LABORATORY SAFETY; SAFETY EQUIPMENT; *INDUSTRIAL ARTS; SCHOOL SHOPS; SCHOOL ACCIDENTS; SUPPLEMENTARY READING MATERIALS; FILMS; FILMSTRIPS; REFERENCE BOOKS; *TRANSPARENCIES; *MANUALS; *UNITS OF STUDY (SUBJECT FIELDS)

ABSTRACT - THIS GUIDE ON SAFETY, DEVELOPED BY A MATERIALS SPECIALIST, IS FOR TEACHER USE IN PLANNING A SAFETY UNIT FOR JUNIOR AND SENIOR HIGH SCHOOL INDUSTRIAL ARTS. THE FIRST SECTION IS DEVOTED TO SAFETY INFORMATION FOR THE TEACHER COVERING: (1) SAFETY RESPONSIBILITIES OF THE SCHOOL ADMINISTRATOR, THE TEACHER, AND THE STUDENT, (2) RECOMMENDATIONS FOR SHOP AND LAB SAFETY, (3) FIRST AID HINTS, AND (4) TEACHER LIABILITY. THE SECOND SECTION IS A UNIT ON GENERAL SAFETY EDUCATION COVERING APPROXIMATELY 40 MINUTES WHEN USED WITH THE 31 TRANSPARENCIES INCLUDED WITH THE DOCUMENT. APPENDED ARE: (1) THE SOUTH CAROLINA EYE PROTECTION LAW, (2) SUGGESTED REFERENCE BOOKS, (3) FILM LIST, (4) FILMSTRIP LIST, (5) NATIONAL STANDARD SCHOOL SHOP SAFETY INSPECTION CHECK LIST, AND (6) TRANSPARENCY LIST. (GR)

VT 009 899
A TENTATIVE GUIDE FOR IMPLEMENTING INDUSTRIAL ARTS EDUCATION. CURRICULUM GUIDE I.

TULSA PUBLIC SCHOOLS, OKLA. DEPT. OF INDUSTRIAL ARTS AND VOCATIONAL-TECHNICAL EDUCATION
TULSA PUBLIC SCHOOLS, P.O. BOX 45208, TULSA, OKLAHOMA 74145 ($3.00).
PUB DATE - 69 120P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL EDUCATION; SECONDARY EDUCATION; *ADMINISTRATOR GUIDES; TEACHER RESPONSIBILITY; INDUSTRIAL ARTS TEACHERS; BIBLIOGRAPHIES; RECORDS (FORMS)

ABSTRACT - ONE OF A SERIES DEVELOPED BY A COMMITTEE OF TEACHERS, THIS REVISED

CURRICULUM GUIDE IS FOR TEACHERS, ADMINISTRATORS AND COUNSELORS TO USE WHEN IMPLEMENTING AN INDUSTRIAL ARTS EDUCATION PROGRAM AT THE JUNIOR AND SENIOR HIGH SCHOOL LEVEL. MAJOR TOPICS ARE: (1) GUIDE FOR INSTRUCTORS OF INDUSTRIAL ARTS EDUCATION, (2) THE INDUSTRIAL ARTS CURRICULUM, (3) INDUSTRIAL ARTS EDUCATION CURRICULUM OFFERINGS, (4) IMPLEMENTING INSTRUCTION IN INDUSTRIAL ARTS EDUCATION, (5) OPENING AND CLOSING PROCEDURES FOR THE INSTRUCTORS IN INDUSTRIAL ARTS EDUCATION, (6) SUGGESTIONS FOR INSTRUCTORS, (7) THE INSTRUCTOR IN INDUSTRIAL ARTS EDUCATION, (8) SUPPLEMENTAL MATERIALS FOR INDUSTRIAL ARTS EDUCATION, (9) SAFETY INSTRUCTION IN INDUSTRIAL ARTS EDUCATION, AND (10) FORMS USED IN INDUSTRIAL ARTS EDUCATION. A LIST OF DEFINED TERMS AND A BIBLIOGRAPHY ARE INCLUDED. A RELATED DOCUMENT, "A TENTATIVE GUIDE FOR IMPLEMENTING VOCATIONAL AND TECHNICAL EDUCATION," IS AVAILABLE AS VT 009 894, (ALSO IN THIS ISSUE). (GR)

VT 009 942 ED 035 733
WILLIAMS, WILLIAM A.
AN ACCIDENT PREVENTION PROGRAM FOR SCHOOL SHOPS AND LABORATORIES; A SUGGESTED GUIDE FOR SCHOOL ADMINISTRATORS.

NATIONAL SAFETY COUNCIL, CHICAGO, ILL.
OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
NATIONAL SAFETY COUNCIL, 425 NORTH MICHIGAN AVENUE, CHICAGO, ILLINOIS 60611 ($6.50).
PUB DATE - ND 254P.

DESCRIPTORS - *LABORATORY SAFETY; INDUSTRIAL ARTS; SCHOOL SHOPS; *SCHOOL SAFETY; *SAFETY EDUCATION; NATIONAL ORGANIZATIONS; GUIDELINES; BIBLIOGRAPHIES; *ACCIDENT PREVENTION; LABORATORY MANUALS; *RESOURCE GUIDES
IDENTIFIERS - *NATIONAL SAFETY COUNCIL

ABSTRACT - EFFECTIVE AND REALISTIC PLANNING AND IMPROVEMENT OF THE EDUCATIONAL ENVIRONMENT CAN PREVENT ACCIDENTS AND INJURIES IN SCHOOL SHOPS AND LABORATORIES. THIS GUIDE MAKES SPECIFIC RECOMMENDATIONS FOR ORGANIZING AND ADMINISTERING SUCH A PROGRAM AND SUGGESTS METHODS AND TECHNIQUES FOR IMPLEMENTING THE RECOMMENDATIONS. CHAPTERS COVER ORGANIZING, ADMINISTERING, AND IMPLEMENTING AN ACCIDENT PREVENTION PROGRAM, EDUCATION AND TRAINING FOR ACCIDENT PREVENTION, AND A BIBLIOGRAPHY OF BOOKS, PAMPHLETS, BOOKLETS, PERIODICAL ARTICLES, UNPUBLISHED MATERIALS, VISUAL AIDS, POSTERS AND CHARTS, AND CATALOGS AND DIRECTORIES. APPENDED ARE (1) STATE LEVEL--MASTER PLAN FORMAT FOR ACCIDENT PREVENTION IN SCHOOL SHOPS AND LABORATORIES, (2) LOCAL LEVEL--MASTER PLAN FORMAT FOR ACCIDENT PREVENTION IN SCHOOL SHOPS AND LABORATORIES, (3) AN OUTLINE FOR A SCHOOL SHOP SAFETY PROGRAM, (4) ACKNOWLEDGEMENT OF SAFETY INSTRUCTION AND PLEDGE, (5) SOURCES OF HELPFUL NATIONAL ORGANIZATIONS, (6) MODEL SCHOOL EYE SAFETY LAW, (7) JOB SAFETY ANALYSIS--WORK SHEET, AND (8) NATIONAL STANDARD SCHOOL SHOP SAFETY INSPECTION LIST. (GR)

VT 010 276
SKUSE, HARLAND G.
BASIC ELECTRICITY, THEORY AND PRACTICE.

THOMAS A. EDISON VOCATIONAL AND TECHNICAL HIGH SCHOOL, ELIZABETH, N.J.
RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J. CURRICULUM LAB.
VOCATIONAL-TECHNICAL CURRICULUM LABORATORY, RUTGERS UNIVERSITY, 10 SEMINARY PLACE, NEW BRUNSWICK, NEW JERSEY 08903 ($2.00).
PUB DATE - JUL64 225P.

DESCRIPTORS - *VOCATIONAL EDUCATION; *ELECTRICITY; *LABORATORY MANUALS; *TEACHING GUIDES; TEACHING PROCEDURES; *LESSON PLANS

ABSTRACT - THE GUIDE PROVIDES BASIC THEORY AND PRACTICE IN ELECTRICITY FOR STUDENT OR TEACHER USE. THE 77 ILLUSTRATED LESSONS, EACH GIVING OBJECTIVE, RELATED INFORMATION, EQUIPMENT (WHEN NEEDED), PROCEDURE AND QUESTIONS, ARE INCLUDED UNDER THE FOLLOWING TOPICS: (1) INTRODUCTION (COVERING GENERAL OCCUPATIONAL INFORMATION AND SAFETY RULES), (2) TOOLS, (3) BASIC SKILLS, (4) ELECTRICAL CONNECTIONS, (5) METERS, (6) OHM'S LAW, (7) BATTERIES, (8) BELL CIRCUITS, (9) ANNUNCIATORS, (10) RELAYS, (11) RESISTANCE DETERMINATION, AND (12) LEAD IDENTIFICATION. ACHIEVEMENT TESTS FOR EACH MAJOR UNIT ARE APPENDED. (GR)

VT 010 290 ED 037 554
DEVELOPMENT AND STRUCTURE OF INDUSTRY: INFORMATION AND JOB SHEETS.

WISCONSIN STATE UNIV., PLATTEVILLE. SCHOOL OF INDUSTRY
INDUSTRIOLOGY PROJECT, DEPARTMENT OF INDUSTRIAL EDUCATION, COLLEGE OF INDUSTRY, WISCONSIN STATE UNIVERSITY, PLATTEVILLE, WISCONSIN 53818 (SET OF FOUR, $6.50).
PUB DATE - ND 134P.

DESCRIPTORS - *INDUSTRIAL ARTS; *SECONDARY EDUCATION; CLASSROOM MATERIALS; *RESOURCE MATERIALS; CURRICULUM DEVELOPMENT; *INSTRUCTIONAL MATERIALS
IDENTIFIERS - *INDUSTRIOLOGY PROJECT

ABSTRACT - THIS BOOKLET IS THE THIRD IN A SERIES OF FOUR INSTRUCTIONAL AIDS DESIGNED TO IMPLEMENT THE FIRST PHASE OF THE INDUSTRIOLOGY CONCEPT. IN THIS BOOK, 46 INFORMATION SHEETS AND 26 JOB SHEETS COVER THE CONTENT AND ACTIVITIES AS SUGGESTED IN THE TEACHING PLAN (VT 010 313) FOR DEVELOPMENT AND STRUCTURE OF INDUSTRY--THE FIRST PHASE OF THE INDUSTRIOLOGY CONCEPT. EACH SHEET IS ONE OR TWO PAGES IN LENGTH AND CONTAINS DIAGRAMS IF NECESSARY FOR CLARITY. OTHER DOCUMENTS IN THIS SERIES ARE AVAILABLE AS VT 010 313-VT 010 315 (ALSO IN THIS ISSUE). (GR)

VT 010 301
SAFE USE OF HAND AND PORTABLE POWER TOOLS; SAFETY IN INDUSTRY, INSTRUCTOR OUTLINE.

BUREAU OF LABOR STANDARDS (DOL), WASHINGTON, D.C. OFFICE OF OCCUPATIONAL SAFETY.
BULLETIN 293

SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (L16.3:293, $.35).
PUB DATE - 69 26P.

DESCRIPTORS - *TEACHING GUIDES; *INDUSTRIAL ARTS; *SAFETY EDUCATION; *INDUSTRIAL EDUCATION; *CHARTS; INDUSTRY; SAFETY; COURSE CONTENT

ABSTRACT - INTENDED AS A GUIDE IN TEACHING SAFETY IN INDUSTRY, THIS INSTRUCTOR OUTLINE WAS DEVELOPED BY STAFF OF THE OFFICE OF OCCUPATIONAL SAFETY OF THE BUREAU OF LABOR STANDARDS. WHILE THE GUIDE INCLUDES CHARTS AND TEACHING TIPS, ADDITIONAL INFORMATION, MATERIAL, AND ILLUSTRATIONS SHOULD BE INCLUDED FOR A COMPLETE PRESENTATION SUITABLE TO THE CONDITIONS, LOCALITY, INDUSTRY, OR OCCUPATIONAL GROUP. CLASSES SHOULD MEET ONCE OR TWICE A WEEK IN TWO 50-MINUTE PERIODS FOR 22 WEEKS, AND BE ATTENDED BY 15 TO 20 PARTICIPANTS. (GB)

VT 010 313 ED 037 555
DEVELOPMENT AND STRUCTURE OF INDUSTRY: TEACHING PLAN AND ACTIVITY PLAN SHEETS.

WISCONSIN STATE UNIV., PLATTEVILLE. COLL. OF INDUSTRY
INDUSTRIOLOGY PROJECT, DEPARTMENT OF INDUSTRIAL EDUCATION, COLLEGE OF INDUSTRY, WISCONSIN STATE UNIVERSITY, PLATTEVILLE, WISCONSIN 53818 (SET OF FOUR, $6.50).
PUB DATE - ND 86P.

DESCRIPTORS - *INDUSTRIAL ARTS; *SECONDARY EDUCATION; CLASSROOM MATERIALS; *RESOURCE MATERIALS; *TEACHING GUIDES; CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *INDUSTRIOLOGY PROJECT

ABSTRACT - THIS GUIDE IS ONE IN A SERIES OF FOUR INSTRUCTIONAL AIDS DESIGNED TO IMPLEMENT THE FIRST PHASE OF THE INDUSTRIOLOGY CONCEPT. THE TEACHING PLAN UTILIZES THE INSTRUCTIONAL AIDS AS PREPARED AND LISTED FOR THIS PHASE OF THE PROGRAM, AND PROVIDES ACTIVITY PLANS DESIGNED TO AID THE TEACHER IN PREPARING FOR AND CONDUCTING SOME OF THE ACTIVITIES OF THE TEACHING PLAN. THIS PLAN IS INTENDED TO SERVE AS A GUIDE FOR THOSE WHO FEEL THE NEED FOR DIRECTION IN PLANNING AND ORGANIZING THE CONTENT OF PHASE I, BUT SHOULD BE ADAPTED FOR USE BY THE INDIVIDUAL INSTRUCTOR. OTHER DOCUMENTS IN THIS SERIES ARE AVAILABLE AS VT 010 290, VT 010 314, AND VT 010 315 (ALSO IN THIS ISSUE). (GR)

VT 010 314 ED 037 556
DEVELOPMENT AND STRUCTURE OF INDUSTRY: STUDY GUIDE.

WISCONSIN STATE UNIV., PLATTEVILLE. SCHOOL OF INDUSTRY
INDUSTRIOLOGY PROJECT, DEPARTMENT OF INDUSTRIAL EDUCATION, COLLEGE OF INDUSTRY, WISCONSIN STATE UNIVERSITY, PLATTEVILLE, WISCONSIN 53818 (SET OF FOUR, $6.50).
PUB DATE - ND 107P.

DESCRIPTORS - *INDUSTRIAL ARTS; *SECONDARY EDUCATION; CLASSROOM MATERIALS; *RESOURCE MATERIALS; *STUDY GUIDES; BIBLIOGRAPHIES; *CURRICULUM DEVELOPMENT; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *INDUSTRIOLOGY PROJECT

ABSTRACT - THE CONCEPT OF INDUSTRIOLOGY IS BASED ON THE PREMISE THAT CHILDREN SHOULD BE EXPOSED TO A COMPREHENSIVE STUDY OF INDUSTRY IN EXISTING INDUSTRIAL ARTS FACILITIES WITH SELECTED INSTRUCTIONAL MATERIALS. THE CONCEPT HAS FOUR PHASES, OF WHICH THIS ONE, THE DEVELOPMENT AND STRUCTURE OF INDUSTRY, IS THE FIRST. OTHER PHASES COVER BASIC ELEMENTS AND PROCESSES OF INDUSTRY, MODERN INDUSTRIES, AND VOCATIONAL AND OCCUPATIONAL GUIDANCE. FOR EACH PHASE, FOUR INSTRUCTIONAL AIDS WERE DEVELOPED THROUGH RESEARCH AND TRIAL TESTING IN HIGH SCHOOLS, AND ARE STILL SUBJECT TO EVALUATION AND REVISION. THIS STUDY GUIDE, ONE OF THE FOUR AIDS FOR THIS PHASE, INCLUDES STUDIES OF THE HISTORY AND DEVELOPMENT OF HISTORY, FOUR GENERAL TYPES OF INDUSTRIES WHICH MAKE UP THE INDUSTRIAL COMPLEX AND SIX BASIC ACTIVITIES TYPICAL OF MOST INDUSTRIES. OTHER DOCUMENTS IN THIS SERIES ARE AVAILABLE AS VT 010 313, VT 010 290, AND VT 010 315 (ALSO IN THIS ISSUE). (GR)

VT 010 315 ED 037 557
DEVELOPMENT AND STRUCTURE OF INDUSTRY: INSTRUCTIONAL AIDS LIST AND BIBLIOGRAPHY.

WISCONSIN STATE UNIV., PLATTEVILLE. COLL. OF INDUSTRY
INDUSTRIOLOGY PROJECT, DEPARTMENT OF INDUSTRIAL EDUCATION, COLLEGE OF INDUSTRY, WISCONSIN STATE UNIVERSITY, PLATTEVILLE, WISCONSIN 53818 (SET OF FOUR, $6.50).
PUB DATE - ND 53P.

DESCRIPTORS - *INSTRUCTIONAL AIDS; *BIBLIOGRAPHIES; INSTRUCTIONAL MATERIALS; *INDUSTRIAL ARTS; *SECONDARY EDUCATION; CLASSROOM MATERIALS; REFERENCE MATERIALS; *RESOURCE MATERIALS; VIDEO TAPE RECORDINGS; FILMSTRIPS; INSTRUCTIONAL FILMS
IDENTIFIERS - *INDUSTRIOLOGY PROJECT

ABSTRACT - THIS BOOKLET IS THE LAST IN A SERIES OF FOUR INSTRUCTIONAL AIDS DESIGNED TO IMPLEMENT THE FIRST PHASE OF THE INDUSTRIOLOGY CONCEPT. THIS LISTING, INTENDED TO SERVE AS A NUCLEUS OF RESOURCE MATERIALS, HAS BEEN GROUPED INTO THE FOLLOWING FOUR SECTIONS: (1) INDEX TO NUMBERED INSTRUCTIONAL MEDIA SOURCES, (2) TITLES OF INFORMATION, JOB, AND ACTIVITY PLAN SHEETS, (3) INSTRUCTIONAL MEDIA OTHER THAN BOOKS, AND (4 BIBLIOGRAPHY. OTHER DOCUMENTS IN THIS SERIES ARE AVAILABLE AS VT 010 290, VT 010 313, AND VT 010 314 (ALSO IN THIS ISSUE). (GR)

VT 010 439
JUNIOR HIGH SCHOOL CURRICULUM GUIDE FOR INDUSTRIAL ARTS.

ALBERTA DEPT. OF EDUCATION, EDMONTON
PUB DATE - SEP69 97P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIA ARTS; JUNIOR HIGH SCHOOLS; INDUSTRIAL ARTS TEACHERS; EDUCATIONAL OBJECTIVES; FOREIGN COUNTRIES

IDENTIFIERS - *ALBERTA; CANADA

ABSTRACT - THIS CURRICULUM GUIDE IS FOR USE BY INDUSTRIAL ARTS TEACHERS OF JUNIOR HIGH SCHOOL PROGRAMS. IT WAS DEVELOPED BY A COMMITTEE OF TEACHERS, SUPERVISORS, AND TEACHER EDUCATORS FOR THE PROVINCE OF ALBERTA, CANADA. MAJOR TOPICS ARE: (1) CONTEMPORARY THOUGHT IN INDUSTRIAL ARTS EDUCATION, (2) FUNCTIONS OF THE JUNIOR HIGH SCHOOL, (3) OBJECTIVES OF THE INDUSTRIAL ARTS PROGRAMS, (4) DEFINITIONS OF TERMS, (5) THE MULTIPLE-ACTIVITY PROGRAM AND ORGANIZATION, (6) HOW TO USE THE GUIDE, (7) SAFETY EDUCATION, (8) GENERAL INFORMATION, AND (9) COURSE CONTENT OUTLINES FOR POWER, MATERIALS, ELECTRICITY, ELECTRONICS-COMPUTER, VISUAL COMMUNICATIONS, GRAPHIC COMMUNICATIONS, INDUSTRIAL CRAFTS, AND DEVELOPMENT AND RESEARCH. THE GUIDE ALSO CONTAINS METHODS OF DEVELOPING CONCEPTS, SUGGESTIONS FOR THE USE OF TEACHING AIDS AND ADDITIONAL REFERENCE BOOKS. THIS CURRICULUM GUIDE IS A REVISION OF VT 007 934 (AIM FALL 1969). (GR)

VT 010 505
MODERN METALWORKING TECHNOLOGY; EPDA INSTITUTE MANUAL.

OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
PUB DATE - 69 248P.MATERIALS DEVELOPED AT EDPA INST. (WESTERN MICHIGAN UNIV., KALAMAZOO, SUMMER 1969).

DESCRIPTORS - *INDUSTRIAL ARTS; FINISHING; METAL INDUSTRY; METALS; WELDING; *METALLURGY; *METAL WORKING OCCUPATIONS; TRADE AND INDUSTRIAL EDUCATION; INSTRUCTIONAL AIDS; *TEACHER DEVELOPED MATERIALS; *SUMMER INSTITUTES; SCRIPTS
IDENTIFIERS - EDUCATION PROFESSIONS DEVELOPMENT ACT; EPDA

ABSTRACT - DEVELOPED BY PARTICIPANTS OF AN EDUCATION PROFESSIONAL DEVELOPMENT ACT (EPDA) INSTITUTE, THIS MANUAL IS FOR TEACHER USE IN CONJUNCTION WITH A SLIDE PRESENTATION IN METALWORKING TECHNOLOGY. UNITS INCLUDE: (1) GAS METAL ARC (MIG), (2) GAS TUNGSTEN ARC (TIG), (3) PLASMA ARC, (4) ELECTRON BEAM WELDING, (5) ELECTRICAL DISCHARGE MACHINING, (6) ELECTRO CHEMICAL GRINDING, (7) ELECTRO CHEMICAL MACHINING, (8) POWDERED METALLURGY, (9) FREE ABRASIVE MACHINING, (10) URETHANE FORMING, AND (11) METAL FINISHING. EACH UNIT CONTAINS A TITLE SLIDE, INTRODUCTION, EQUIPMENT, PROCESSES, ADVANTAGES, AND DISADVANTAGES. A BIBLIOGRAPHY, REVIEW QUESTIONS, AND A GLOSSARY ARE INCLUDED WITH EACH SECTION. (GR)

VT 010 605
METALWORK 1-2.

MILWAUKEE PUBLIC SCHOOLS, WIS. DIV. OF CURRICULUM AND INSTRUCTION.

MILWAUKEE BOARD OF DIRECTORS, CURRICULUM LIBRARY, 5225 WEST VLIET STREET, P.O. DRAWER 10 K, MILWAUKEE, WISCONSIN 53201 ($6.00).
PUB DATE - 64 73P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *METALS; GRADE 7; MALES; COURSE OBJECTIVES; COURSE CONTENT; COURSE DESCRIPTIONS; DIAGNOSTIC TESTS; BIBLIOGRAPHIES; INSTRUCTIONAL AIDS

ABSTRACT - DEVELOPED BY A CURRICULUM COMMITTEE OF INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN PLANNING A 2-SEMESTER INDUSTRIAL ARTS COURSE FOR JUNIOR HIGH SCHOOL BOYS STUDYING METALWORKING. CONTENTS INCLUDE: (1) INDUSTRIAL ARTS PROGRAM OBJECTIVES, (2) COURSE DESCRIPTION, (3) COURSE OUTLINE, (4) JOB OPPORTUNITIES, AND (5) DESCRIPTION OF APPRENTICESHIP PROGRAM IN WISCONSIN. THE INSTRUCTOR WILL FIND BASIC SKILLS, AND UNDERSTANDINGS, AND SUGGESTED INSTRUCTIONAL AIDS AND PROJECTS LISTED IN THE COURSE OUTLINE. APPENDED ARE: A DIAGNOSTIC TEST, TYPICAL JOB-PLANNING SHEET, INSTRUCTION SHEET, INSTRUCTION CHART, SUGGESTED SAFETY TESTS FOR EACH MACHINE, SAFE PRACTICE FORM, TEST ON RELATED MATHEMATICS, SEVERAL UNIT TESTS, VOCABULARY LIST, BIBLIOGRAPHY OF REFERENCE TEXTS, AND AN ANNOTATED LISTING OF INSTRUCTIONAL AIDS WITH THEIR RESPECTIVE SOURCES. (GR)

VT 010 613
HULEY, MILAN; JACOBSON, JOHN
FUNDAMENTALS OF ELECTRICITY AND ELECTRONICS. INDUSTRIAL ARTS GUIDE.

MILWAUKEE PUBLIC SCHOOLS, WIS. DIV. OF CURRICULUM AND INSTRUCTION.
PUB DATE - 65 98P.

DESCRIPTORS - *CURRICULUM GUIDES; *ELECTRICITY; *ELECTRONICS; *INDUSTRIAL ARTS; GRADE 8; COURSE OBJECTIVES; COURSE DESCRIPTIONS; COURSE CONTENT; LABORATORY EXPERIMENTS; BIBLIOGRAPHIES; FILMS; FILMSTRIPS; INSTRUCTIONAL AIDS

ABSTRACT - INCORPORATING SUGGESTIONS FROM INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE IS FOR TEACHER USE IN SELECTING, ORGANIZING, AND PRESENTING THE CONTENT OF A 2-SEMESTER INDUSTRIAL ARTS COURSE AT THE EIGHTH-GRADE LEVEL IN ELECTRICITY AND ELECTRONICS. THE GUIDE INCLUDES: (1) COURSE OBJECTIVES, (2) SAFETY RULES FOR SHOP, (3) COURSE DESCRIPTION, (4) COURSE OUTLINE, (5) 62 JOB ASSIGNMENTS, (6) SUGGESTED JOB SHEETS, (7) LISTING OF FILMS AND FILMSTRIPS, (8) BIBLIOGRAPHY, AND (9) LISTING OF FREE AND INEXPENSIVE INSTRUCTIONAL AIDS. ASSIGNMENT SHEETS GIVE OBJECTIVE, REFERENCES, RELEVANT INFORMATION, PROCEDURE, PROBLEMS, AND NECESSARY TOOLS AND MATERIALS. (GR)

VT 010 644
FIRE CHEMISTRY.

CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO. BUREAU OF INDUSTRIAL EDUCATION.
CALIFORNIA STATE DEPARTMENT OF EDUCATION, BUREAU OF INDUSTRIAL EDUCATION, FIRE SERVICE TRAINING PROGRAM, 721 CAPITOL MALL, ROOM 414, SACRAMENTO, CALIFORNIA 95814 ($.25).
PUB DATE - 67 22P.

DESCRIPTORS - *INDUSTRIAL EDUCATION; *FIRE

SCIENCE EDUCATION; SAFETY EDUCATION; *CHEMICAL REACTIONS; *VOCABULARY
IDENTIFIERS - *FIRE CHEMISTRY

ABSTRACT - THIS DOCUMENT ON FIRE CHEMISTRY CONTAINS THE TERMINOLOGY AND DEFINITIONS OF 15 TERMS USED TO DESCRIBE FIRE AND THE CHEMISTRY INVOLVED IN FIRE. SEVERAL BASIC EXPERIMENTS ARE DESCRIBED TO EXPLAIN THE PHENOMENA OF EXPANSION AND CONTRACTION, TRANSMISSION OF HEAT, AND DUST EXPLOSIONS. THE DOCUMENT IS ILLUSTRATED WITH LINE DRAWINGS. (GR)

VT 010 737
DEMONSTRATION AIDS FOR AVIATION EDUCATION.

CIVIL AIR PATROL, WASHINGTON, D.C. CURRICULUM LAB.
PUB DATE - 68 36P.

DESCRIPTORS - *AVIATION TECHNOLOGY; *AEROSPACE TECHNOLOGY; *DEMONSTRATIONS (EDUCATIONAL); *NATURAL SCIENCES; *INSTRUCTIONAL MATERIALS; INDUSTRIAL ARTS; TEACHER DEVELOPED MATERIALS; SUMMER WORKSHOPS
IDENTIFIERS - *AIR AGE; AVIATION EDUCATION

ABSTRACT - DEVELOPED BY TEACHERS IN AN AVIATION EDUCATION WORKSHOP AT MIAMI UNIVERSITY, THIS PUBLICATION CONTAINS 105 DEMONSTRATIONS ILLUSTRATING PRINCIPLES OF AVIATION WITHIN A CLASSROOM SETTING. THE DEMONSTRATIONS ARE GROUPED INTO THE FOLLOWING UNITS: (1) PROPERTIES OF AIR, (2) WHAT MAKES AN AIRPLANE FLY, AND (3) WEATHER IS IMPORTANT TO AVIATION. EACH DEMONSTRATION CONTAINS A LIST OF NECESSARY EQUIPMENT AND STEP-BY-STEP PROCEDURES. THE DEMONSTRATIONS CAN BE USED FOR TEACHING NATURAL SCIENCE AS WELL AS AVIATION EDUCATION TO BOTH OLDER AND ELEMENTARY SCHOOL STUDENTS. (GR)

VT 011 074
INDUSTRIAL ARTS SAFETY CHECKLIST.

WASHINGTON STATE DEPT. OF PUBLIC INSTRUCTION, OLYMPIA. OFFICE OF THE STATE SUPERINTENDENT.
PUB DATE - 69 16P.

DESCRIPTORS - *INDUSTRIAL ARTS; LABORATORY SAFETY; *SAFETY; *INSPECTION; *FIELD CHECK; EDUCATIONAL SPECIFICATIONS; *STATE PROGRAMS
IDENTIFIERS - *WASHINGTON STATE

ABSTRACT - PREPARED BY STATE PERSONNEL AND FIELD-TESTED IN THE PUBLIC SCHOOLS, THIS SAFETY INSPECTION CHECKLIST FOR INDUSTRIAL EDUCATION WILL SERVE TO: (1) INFORM, EDUCATE, AND REMIND PEOPLE OF WHAT TO LOOK AT, (2) TRAIN PERSONNEL TO BE OBSERVANT AND AWARE OF THEIR ENVIRONMENT, (3) PROVIDE A SOURCE OF FEED-BACK INFORMATION TO TEACHERS AND ADMINISTRATORS, AND (4) PROVIDE A RECORD OF SAFETY ITEMS AND SAFETY ACTIVITIES. AREAS GIVEN CONSIDERATION FOR INSPECTION ARE: ADMINISTRATION, PERSONNEL, ACTIVITIES, INSTRUCTION, ELECTRICAL SAFEGUARDS, EQUIPMENT, HOT METALS, GAS, WELDING, FACILITIES, STORAGE, AND FIRE PRECAUTIONS. (GR)

VT 011 086
MEEHAN, MICHAEL
INDUSTRIAL ARTS.

WYDOWN JUNIOR HIGH, CLAYTON, MO.
PUB DATE - AUG67 79P.

DESCRIPTORS - *INDUSTRIAL ARTS; *CURRICULUM GUIDES; *GRADE 7; *GRADE 8; *COURSE CONTENT; JUNIOR HIGH SCHOOLS; COURSE OBJECTIVES; COURSE DESCRIPTIONS; BIBLIOGRAPHIC CITATIONS; AUDIOVISUAL AIDS

ABSTRACT - INTENDED FOR INDUSTRIAL ARTS STUDENTS IN GRADES 7 AND 8, THIS CURRICULUM GUIDE WAS INDIVIDUALLY AUTHORED AND COVERS BROAD GENERAL AND PRACTICAL PHASES OF INDUSTRIAL ACTIVITIES. THE ACTIVITIES ARE ORGANIZED TO FACILITATE THE PROGRESSIVE MOVEMENT OF INDIVIDUAL STUDENTS FROM ONE ACTIVITY TO ANOTHER. IN THE SEVENTH GRADE, THE PUPIL WILL BE INTRODUCED TO THE FUNDAMENTALS OF MECHANICAL DRAWING, WOODWORKING, METAL WORKING, LEATHERCRAFT, AND BASIC ELECTRICITY. THE EIGHTH GRADE PUPIL WILL DO ADVANCED WORK IN THE AREAS OF MECHANICAL DRAWING, BLUEPRINT READING, MACHINE WOODWORKING, AND METAL WORKING. IN ADDITION, PLASTICS, POWER MECHANICS, AND AN INTRODUCTION TO ELECTRONICS ARE COVERED IN THE EIGHTH GRADE. INCLUDED ARE REFERENCES, TEACHING PLANS, ASSIGNMENT SHEETS, AND AUDIOVISUAL AIDS AND MATERIALS. (GB)

VT 011 087
INDUSTRIAL ARTS CURRICULUM GUIDE.

SOUTH-WESTERN CITY SCHOOL DISTRICT, GROVE CITY, OHIO.
PUBLICATIONS OFFICE, SOUTH WESTERN CITY SCHOOLS, 3708 SOUTH BROADWAY, GROVE CITY, OHIO 43123 ($1.50).
PUB DATE - ND 37P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; GRAPHIC ARTS; ELECTRONICS; WOODWORKING; *SHOP CURRICULUM; GRADE 9; GRADE 10; GRADE 11; GRADE 12

ABSTRACT - PREPARED BY A COMMITTEE OF JUNIOR AND SENIOR HIGH SCHOOL TEACHERS, THIS GUIDE IS FOR USE BY ADMINISTRATORS, SUPERVISORS, AND TEACHERS IN PLANNING AND IMPLEMENTING INDUSTRIAL ARTS PROGRAMS FOR GRADES 9 THROUGH 12. FOLLOWING GENERAL INFORMATION ON OBJECTIVES, ADMINISTRATION, FACILITIES, AND TEACHING SUGGESTIONS, TOPICAL OUTLINES ARE GIVEN FOR: (1) INDUSTRIAL ARTS, INCLUDING EXPLORATORY DRAWING AND EXPLORATORY GRAPHICS (GRADE 9), (2) EXPLORATORY ELECTRICITY, EXPLORATORY ENGINES, EXPLORATORY WOODS, EXPLORATORY METALS, AND MECHANICAL DRAWING I (GRADE 10), (3) INDUSTRIAL ARTS I AND MECHANICAL DRAWING II (GRADE 11), AND (4) INDUSTRIAL ARTS II AND ENGINEERING DRAWING (GRADE 12). OUTLINES CONTAIN OBJECTIVES, CONTENT, TIME ALLOTMENT, AND BASIC TEXT, AND IN SOME CASES, SUGGESTED LEARNING ACTIVITIES AND PROJECTS. (AW)

VT 011 295
CURRICULUM GUIDE IN METALS, GRADES SEVEN THROUGH TWELVE. SECONDARY CURRICULUM BULLETIN

NO. 177.

KANSAS CITY PUBLIC SCHOOLS, MO. INDUSTRIAL ARTS DEPT.
BUSINESS SERVICES DIVISION, 601 BOARD OF EDUCATION BUILDING, 1211 MCGEE STREET, KANSAS CITY, MISSOURI 64106 ($2.50).
PUB DATE - 69 213P.

DESCRIPTORS - *CURRICULUM GUIDES; *METAL WORKING OCCUPATIONS; *SHEET METAL WORK; *METALS; *INDUSTRIAL ARTS; TEACHING GUIDES; SECONDARY GRADES; ELEMENTARY GRADES

ABSTRACT - PREPARED BY A CURRICULUM COMMITTEE, THIS GUIDE IS DESIGNED TO AID INDUSTRIAL ARTS TEACHERS IN PLANNING AND CONDUCTING METALS COURSES FOR GRADES 7-12. TEACHING SUGGESTIONS AND GENERAL INFORMATION ON THE FORMAT OF THE GUIDE ARE FOLLOWED BY FOUR SUGGESTED CURRICULUM OUTLINES, WITH THE FIRST COMBINING GRADES 7 AND 8 (SEVEN UNITS), THE SECOND COVERING GRADE 9 (SEVEN UNITS), THE THIRD FOR GRADE 10 (SIX UNITS), AND THE FOURTH COMBINING GRADES 11 AND 12 (SIX UNITS). UNITS PROVIDE OVERVIEW, SPECIFIC OBJECTIVES, VOCABULARY, CONCEPTS AND GENERALIZATIONS TO BE ACQUIRED, STUDENT ACTIVITIES AND INVESTIGATIONS, EVALUATION SUGGESTIONS, AND RESOURCE MATERIALS. A STYLE SHEET FOR WRITTEN WORK IS APPENDED. (AW)

VT 011 334
BEGINNING DRAFTING. A HANDBOOK FOR GRADES SEVEN AND EIGHT.

KANSAS CITY PUBLIC SCHOOLS, MO. INDUSTRIAL ARTS DEPT.
BUSINESS SERVICES DIVISION, 601 BOARD OF EDUCATION BUILDING, 1211 MCGEE STREET, KANSAS CITY, MISSOURI 64106 ($1.00).
PUB DATE - NOV58 83P.

DESCRIPTORS - *WORKBOOKS; *INDUSTRIAL ARTS; *DRAFTING; *STUDY GUIDES; ORTHOGONAL PROJECTION; ENGINEERING DRAWING; TEACHING GUIDES; GRADE 7; GRADE 8; TRADE AND INDUSTRIAL EDUCATION; SECONDARY GRADES

ABSTRACT - DEVELOPED BY A CURRICULUM COMMITTEE FOR THE KANSAS CITY MISSOURI PUBLIC SCHOOLS, THIS WORKBOOK IS FOR TEACHER AND STUDENT USE IN INDUSTRIAL ARTS DRAFTING COURSES IN GRADES 7 AND 8. UNITS ARE: (1) FREEHAND SKETCHING, (2) CHARTS, MAPS, AND GRAPHS, (3) ELECTRICAL DRAFTING, AND (4) FREEHAND WORKING, INSTRUMENT WORKING, PICTORIAL, ARCHITECTURAL, MACHINE, AND SHEET METAL DRAWINGS. EACH UNIT CONTAINS RELATED GENERAL INFORMATION AND ASSIGNMENTS. WORKSHEETS FOR USE WITH THIS DOCUMENT ARE AVAILABLE FROM THE SOURCE OF AVAILABILITY LISTED ABOVE. (GEB)

VT 011 363
INDUSTRIAL ARTS CURRICULUM GUIDE FOR THE STATE OF WYOMING GRADES K-12.

WYOMING RESEARCH COORDINATING UNIT IN VOCATIONAL-TECHNICAL EDUCATION, CHEYENNE.
PUB DATE - AUG69 82P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *PROGRAM DESCRIPTIONS; INDUSTRIAL ARTS TEACHERS; *STATE CURRICULUM GUIDES; SECONDARY GRADES; *COURSE DESCRIPTIONS; PREVOCATIONAL EDUCATION; ELEMENTARY GRADES; CURRICULUM PLANNING

ABSTRACT - PREPARED BY MEMBERS OF THE WYOMING STATE INDUSTRIAL ARTS CURRICULUM COMMITTEE, THIS GUIDE IS INTENDED TO AID WYOMING INDUSTRIAL ARTS TEACHERS IN PLANNING AND CONDUCTING IMPROVED PROGRAMS ON BOTH THE ELEMENTARY AND SECONDARY LEVELS. FOLLOWING BRIEF INFORMATION ON THE PHILOSOPHY OF THE PROGRAM, GOALS, ORGANIZATIONAL PLANS, SAFETY, PERSONNEL AND SHOP MANAGEMENT, AND POLICY REGARDING SPECIAL STUDENTS, NINE CONTENT AREAS ARE OUTLINED, INCLUDING: (1) DRAFTING, (2) WOODWORKING, (3) METALWORKING, (4) PLASTICS, (5) BASIC ELECTRICITY, (6) POWER MECHANICS AND TRANSPORTATION, (7) HOME MAINTENANCE, (8) GRAPHIC ARTS, AND (9) CRAFTS, SUCH AS CERAMICS, LEATHERCRAFT, AND ART METALS. PROGRAM EVALUATION GUIDELINES AND AN APPENDIX CONTAINING EYE SAFETY LEGISLATION, SAFETY COLOR CODING, AND A CONTENT AREA BIBLIOGRAPHY ARE ALSO INCLUDED. (AW)

VT 011 399 ED 040 303
INDIVIDUALIZED MATERIAL FOR INDUSTRIAL EDUCATION BASED ON THE AVA BOOKLET "A GUIDE TO IMPROVING INSTRUCTION IN INDUSTRIAL ARTS".

WAYNE STATE UNIV., DETROIT, MICH.
PUB DATE - ND 1,041P.

DESCRIPTORS - *INDUSTRIAL ARTS; *INDIVIDUALIZED PROGRAMS; INDIVIDUALIZED INSTRUCTION; *CURRICULUM DEVELOPMENT; *INSTRUCTIONAL MATERIALS; *TEACHER DEVELOPED MATERIALS; INDUSTRY; SIMULATION; INDIVIDUALIZED CURRICULUM
IDENTIFIERS - *EXPERIENCED TEACHER FELLOWSHIP PROGRAM; EXTFP; AMERICAN VOCATIONAL ASSOCIATION; AVA

ABSTRACT - THIS PACKAGE OF INDIVIDUALIZED CURRICULUM MATERIALS FOR INDUSTRIAL ARTS, DEVELOPED BY THE 1969-70 EXPERIENCED TEACHER FELLOWSHIP PROGRAM FOR TEACHER AND STUDENT USE, IS A RESULT OF AN IN-DEPTH STUDY OF THE 1968 REVISION OF THE AMERICAN VOCATIONAL ASSOCIATION'S BOOKLET, "A GUIDE TO IMPROVING INSTRUCTION IN INDUSTRIAL ARTS." THE 10 MAJOR UNITS INCLUDED ARE: (1) INDUSTRY AND CIVILIZATION, (2) THE INDUSTRY, (3) ORGANIZATION AND MANAGEMENT, (4) RESEARCH AND DEVELOPMENT, (5) PLANNING FOR PRODUCTION AND MANUFACTURING, (6) PRODUCTION AND MANUFACTURING, (7) DISTRIBUTION, (8) SERVICE, (9) HAND TOOLS AND SIMPLE MACHINES, AND (10) SOPHISTICATED MACHINES. EACH UNIT, IDENTIFIED BY A PREFIX LETTER, CONTAINS COLOR CODED INDIVIDUALIZED PACKAGES OF INFORMATION FOR STUDENT USE, TEACHER USE, AND TEACHER REFERENCE INFORMATION, WHICH OUTLINES SPECIAL PREPARATIONS OR MATERIALS REQUIRED FOR STUDENT OR TEACHER PACKAGES. EACH PACKAGE WITHIN THE UNIT IS DESIGNED TO BE FLEXIBLE FOR USE IN GRADE 7 THROUGH GRADE 12 AND WITH SLIGHT MODIFICATION IT CAN BE USED FOR LOWER OR HIGHER GRADES. SEVERAL TEACHER-DESIGNED SIMULATION GAMES ABOUT INDUSTRY ARE INCLUDED. A RELATED DOCUMENT IS AVAILABLE AS ED 024 814

OR VT 007 380 (ARM SPRING 1970). (GR)

VT 011 485
DIERS, ANDREW V.
LETTERING, LAP--UNIT 1. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 10P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING GRAPHICS; ENGINEERING DRAWING; INSTRUCTIONAL MATERIALS; SIGNS; PRINTING; INDIVIDUAL STUDY
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS AN INTRODUCTION TO FREEHAND LETTERING FOR BASIC DRAFTING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING, TOPICS ARE: (1) HOW TO USE THIS LEARNING ACTIVITY PACKAGE, (2) FLOW CHART, (3) GRADING PROCEDURE, (4) PRIMARY IDEA, (5) SECONDARY IDEA, (6) RATIONALE, (7) PRE-TEST, (8) STUDENT OBJECTIVE, (9) REQUIRED ACTIVITIES, (10) OPTIONAL ACTIVITIES, AND (11) TEACHER EVALUATION TEST. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 486
DIERS, ANDREW V.
INSTRUMENT TECHNIQUE, LAP--UNIT II.
ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 7P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING GRAPHICS; ENGINEERING DRAWING; INSTRUCTIONAL MATERIALS; INDIVIDUAL STUDY
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY ON INSTRUMENT TECHNIQUES OF BASIC DRAWING FOR DRAFTING IS DESIGNED AS A SELF INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING. CONTENTS ARE: (1) INSTRUMENT TECHNIQUES, (2) DRAWING UNIFORM LINES AT VARIOUS ANGLES, (3) DRAWING "THE ALPHABET OF LINES," (4) USING THE ARCHITECT'S SCALE, AND (5) DRAWING CIRCLES AND ARCS UNIFORMLY WITH THE USE OF A COMPASS. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 487
HAMES, DAN
THE ABC'S OF VIEWS OF OBJECTS. MINI LAP--UNIT 3. BASIC DRAFTING SURVEY CLASS.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - 67 40P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ORTHOGONAL PROJECTION; ENGINEERING GRAPHICS; ENGINEERING DRAWING; INSTRUCTIONAL MATERIALS; BIBLIOGRAPHIC CITATIONS; INDIVIDUAL STUDY
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS A DESCRIPTION OF THE SHAPE AND SIZE OF OBJECTS THROUGH THE LANGUAGE OF DRAWING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING, THE TOPICS ARE ORTHOGRAPHIC PROJECTION AND PICTORIAL DRAWINGS WHICH INCLUDE ISOMETRIC, OBLIQUE, AND PERSPECTIVE. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 488
DIERS, ANDREW V.
MULTI-VIEW DRAWINGS, LAP--UNIT IV.
ENGINEERING 20, BASIC DRAFTING.

MODESTO JUNIOR COLL., CALIF.
PUB DATE - ND 10P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING DRAWING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS; INDIVIDUAL STUDY
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS AN INTRODUCTION TO MULTI-VIEW DRAWINGS FOR BASIC DRAFTING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING, CONTENT INCLUDES SUGGESTIONS FOR RECOGNIZING AND DRAWING VARIOUS VIEWS OF OBJECTIVES. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 489
HAMES, DAN
INTRODUCTION TO APPLIED DRAWING. BASIC DRAFTING SURVEY CLASS, UNIT 5.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - 68 56P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING DRAWING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS; ILLUSTRATIONS; BIBLIOGRAPHIC CITATIONS; INDIVIDUAL STUDY; DIAGRAMS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS AN INTRODUCTION TO APPLIED DRAWING FOR BASIC DRAFTING. DESIGNED AS A SELF INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING, THESE TOPICS ARE PRESENTED: (1) USE AND CARE OF COMMON DRAFTING TOOLS AND MATERIALS, (2) THE STANDARD LAYOUT OF A SHEET, (3) FUNDAME. AL OPERATIONS AND TECHNIQUES, (4) USE OF COMPASS AND TRIANGLES, (5) CONSTRUCTION OF MULTI-VIEW DRAWINGS, AND (6) USE OF LINE SYMBOLS AND LINE WEIGHTS. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 490
DIERS, ANDREW V.
ADVANCED MULTI-VIEW DRAWINGS, LAP--UNIT VI. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 7P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING DRAWING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS ADVANCED MULTI-VIEW DRAWINGS FOR BASIC DRAFTING. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES ARE AVAILABLE. (GB)

VT 011 491
DIERS, ANDREW V.
AUXILIARY VIEWS, LAP--UNIT VII. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 7P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING GRAPHICS; ENGINEERING DRAWING; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS ACTIVITIES PERTAINING TO AUXILIARY VIEWS FOR BASIC DRAFTING. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 492
DIERS, ANDREW V.
SECTIONAL VIEWS, LAP--UNIT VIII. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 14P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING DRAWING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS USE AND TECHNIQUES OF SECTIONAL DRAWINGS IN BASIC DRAFTING. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES ARE AVAILABLE. (GB)

VT 011 493
DIERS, ANDREW V.
DIMENSIONING LAP--UNIT IX. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 11P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING GRAPHICS; ENGINEERING DRAWING; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PACKAGE PRESENTS THE BASIC THEORY OF FRACTIONAL DIMENSIONING IN BASIC DRAFTING. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 494
DIERS, ANDREW V.
WORKING DRAWINGS, LAP--UNIT X. ENGINEERING 20, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 7P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *DRAFTING; *ENGINEERING DRAWING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVIYY PRESENTS IDEAS NEEDED TO MAKE A SET OF SIMPLE WORKING DRAWINGS IN BASIC DRAFTING. THIS DOCUMENT IS ONE IN A SERIES OF RELATED DOCUMENTS AVAILABLE AS VT 011 485-VT 011 494, ALL IN THIS ISSUE. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GB)

VT 011 495
SHREVE, R.M.
SAFETY, YOUR CONCERN AND MINE, LEARNING ACTIVITY PACKAGE, SAFETY IN THE WOOD SHOP. LAP NO. 2.

PUB DATE - JUL68 20P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; HIGH SCHOOL STUDENTS; MANUALS; AUTOINSTRUCTIONAL AIDS; INSTRUCTIONAL MATERIALS; EDUCATIONAL OBJECTIVES; *WOODWORKING; HAND TOOLS; *LABORATORY SAFETY; SAFETY EDUCATION
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED WITH ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III FUNDS, THIS LEARNING PACKAGE DESCRIBES SAFETY RULES FOR THE HIGH SCHOOL INDUSTRIAL ARTS WOOD SHOP. THE SELF-INSTRUCTIONAL UNIT CONTAINS: (1) RATIONALE, (2) PRIMARY AND SECONDARY IDEAS, (3) GENERAL INFORMATION, (4) THREE INSTRUCTIONAL OBJECTIVES, AND (5) INSTRUCTIONAL MATERIALS. THE INSTRUCTIONAL OBJECTIVES COVER GENERAL SAFETY RULES, SAFETY WITH HAND TOOLS, AND SAFETY WITH MACHINE TOOLS. PICTURES OF WOODWORKING MACHINERY AND MACHINE SAFETY INSTRUCTIONS ARE GIVEN. (GR)

VT 011 496
VAUGHN, CHARLES, AND OTHERS
COMPONENTS OF THE AUTOMOBILE. UNIT 2--LAP NO. 1.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - JUL68 15P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; HIGH SCHOOL STUDENTS; MANUALS; *AUTOINSTRUCTIONAL AIDS; INSTRUCTIONAL MATERIALS; EDUCATIONAL OBJECTIVES; AUTO MECHANICS; *AUTO MECHANICS (OCCUPATION); MOTOR VEHICLES; POWER MECHANICS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED WITH ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III FUNDS, THIS LEARNING ACTIVITY PACKAGE IS A SELF-INSTRUCTIONAL UNIT ON VARIOUS COMPONENTS OF THE AUTOMOBILE. THE UNIT CONTAINS: (1) RATIONALE, (2) PRIMARY IDEA, (3) SECONDARY IDEAS, (4) OBJECTIVES, (5) PRE-TEST, (6) ACTIVITIES, (7) INSTRUCTIONAL SHEETS, (8) ASSIGNMENT SHEET, AND (9) AUTO CHASSIS TEST. A PRETEST ANSWER SHEET AND A BIBLIOGRAPHY ARE GIVEN. (GR)

VT 011 497
WILLIAMS, EDGAR, AND OTHERS
SAFETY IN THE AUTO SHOP. UNIT NO. 1--LAP NO. 1.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - ND 18P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; HIGH SCHOOL STUDENTS; MANUALS; *AUTOINSTRUCTIONAL AIDS; INSTRUCTIONAL MATERIALS; EDUCATIONAL OBJECTIVES; *AUTO MECHANICS; *LABORATORY SAFETY; SAFETY EDUCATION
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED WITH ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III FUNDS, THIS LEARNING ACTIVITY PACKAGE IS ON SAFETY IN THE HIGH SCHOOL AUTO SHOP. DESIGNED AS A SELF-INSTRUCTIONAL UNIT, IT CONTAINS: (1) RATIONALE, (2) PRIMARY IDEA, (3) SECONDARY IDEA, (4) OBJECTIVES, (5) PRETEST, (6) ACTIVITIES, AND (7) EIGHT INSTRUCTIONAL SHEETS. A PRETEST ANSWER SHEET AND BIBLIOGRAPHY ARE INCLUDED. (GR)

VT 011 498
PETERSON, L.C.
GEOMETRY OF DRAWING, DRAFTING.--UNIVERSAL LANGUAGE OF INDUSTRY. LAP NO. 6.

PUB DATE - JUL68 32P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; MANUALS; *AUTOINSTRUCTIONAL AIDS; INSTRUCTIONAL MATERIALS; EDUCATIONAL OBJECTIVES; *DRAFTING; GEOMETRIC CONCEPTS; ENGINEERING DRAWING; *ORTHOGONAL PROJECTION; HIGH SCHOOL STUDENTS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - DEVELOPED WITH ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III FUNDS, THIS LEARNING ACTIVITY PACKAGE TEACHES CERTAIN GEOMETRICAL CONSTRUCTIONS NEEDED IN DRAFTING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR HIGH SCHOOL STUDENTS, IT CONTAINS: (1) RATIONALE, (2) GEOMETRIC APPLICATIONS, (3) PRIMARY IDEAS, (4) STUDENT OBJECTIVES, (5) PRETEST TERMS, (6) KEY TO PRETEST TERMS, (7) PRETEST DRAWING, (8) REQUIRED AND OPTIONAL ACTIVITIES, (9) INSTRUCTIONS FOLLOWING COMPLETION OF ACTIVITIES, AND (10) 12 DRAWINGS. A BIBLIOGRAPHY IS INCLUDED. (GR)

VT 011 502
HAMES, DAN
DIMENSIONING RULES AND PRINCIPLES. LAP NO. 11.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - 68 12P.

DESCRIPTORS - *LEARNING ACTIVITIES; *AUTOINSTRUCTIONAL AIDS; *DRAFTING; *GUIDELINES; INDUSTRIAL ARTS; HIGH SCHOOL STUDENTS; MANUALS; INSTRUCTIONAL AIDS
IDENTIFIERS - ELEMENTARY AND SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGE; LAP

ABSTRACT - THIS LEARNING ACTIVITY PACKAGE, DEVELOPED UNDER A GRANT FROM ELEMENTARY SECONDARY EDUCATION ACT (ESEA) TITLE III, DESCRIBES DIMENSIONING RULES AND PRINCIPLES OF DRAFTING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT FOR INDIVIDUAL LEARNING, IT CONTAINS: (1) RATIONALE, (2) PRIMARY IDEAS, (3) SECONDARY IDEAS, (4) PRETEST INSTRUCTIONS,

AND (5) FIVE SECONDARY IDEAS. EACH SECONDARY IDEA INCLUDES THE STATED OBJECTIVE AND ACTIVITIES. A BIBLICGRAPHY IS GIVEN. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE. (GR)

VT 011 507
COOPER, CLARE
PICTORIAL DRAWINGS. DRAFTING--LANGUAGE OF INDUSTRY. LAP NO. 8, BASIC DRAFTING.

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - JUL68 13P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *ENGINEERING DRAWING; *DRAFTING; ENGINEERING GRAPHICS; INSTRUCTIONAL MATERIALS; AUTOINSTRUCTIONAL AIDS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGES; LAPS

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PRESENTS PICTORIAL DRAWING IN BASIC DRAFTING. DESIGNED AS A SELF-INSTRUCTIONAL UNIT, THE CONTENT COVERS ISOMETRIC, OBLIQUE, AND PERSPECTIVE DRAWING METHODS. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE IN THIS ISSUE. (GB)

VT 011 509
SHREVE, R.M.
IDENTIFICATION, CARE, AND USES OF HAND TOOLS.

SUMMERVILLE UNION HIGH SCHOOL, CALIF. WOOD SHOP DEPT.
PUB DATE - JUL68 23P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *WOODWORKING; *HAND TOOLS; ILLUSTRATIONS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGES; LAPS

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY PACKAGE PRESENTS MATERIAL ON IDENTIFICATION, CARE, AND USES OF HAND TOOLS. ILLUSTRATIONS ARE PRESENTED WITH TIPS ON USES AND CARE. ADDITIONAL LEARNING ACTIVITY PACKAGES ARE AVAILABLE IN THIS ISSUE. (GB)

VT 011 550
SEGAL, ALBERT J.
FIND YOUR WAY. LEARNING ACTIVITY PACKAGE, "PRE-LAP".

HUGHSON UNION HIGH SCHOOL, CALIF.
PUB DATE - 68 46P.

DESCRIPTORS - *INDUSTRIAL ARTS; *LEARNING ACTIVITIES; *SCHOOL SHOPS; *SAFETY; ILLUSTRATIONS; INSTRUCTIONAL MATERIALS
IDENTIFIERS - *ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; LEARNING ACTIVITY PACKAGES; LAPS

ABSTRACT - DEVELOPED UNDER A GRANT FROM THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE III, THIS LEARNING ACTIVITY IS INTENDED TO HELP THE NEW STUDENT BECOME FAMILIAR WITH THE PLACEMENT, PURPOSE, USES, AND SAFETY RULES OF POWER EQUIPMENT IN THE SHOP. INCLUDED ARE: (1) INSTRUCTIONAL OBJECTIVES, (2) ACTIVITY DIRECTIONS, (3) GENERAL SAFETY RULES, (4) DESCRIPTION OF CLEAN-UP JOBS, AND (5) NAMES AND USES OF EQUIPMENT. ADDITIONAL LEARNING ACTIVITY PACKAGES (LAP) ARE AVAILABLE IN THIS ISSUE. (GB)

VT 011 748
FUNCTIONS OF INDUSTRY.

GEORGIA SOUTHERN COLL., STATESBORO.
PUB DATE - ND 212P.RESULT OF THE EPDA INST. IN INDUSTRIAL AND CAREER DEVELOPMENT (GEORGIA SOUTHERN COLL., STATESBORO).

DESCRIPTORS - *INDUSTRIAL ARTS; *TEACHING GUIDES; *COURSE CONTENT; *INDUSTRY; *FILMS; FILMSTRIPS; INDUSTRIAL AIDS; COURSE OBJECTIVES; SECONDARY GRADES
IDENTIFIERS - *EDUCATION PROFESSIONS DEVELOPMENT ACT; EPDA

ABSTRACT - INTENDED FOR TEACHERS OF INDUSTRIAL ARTS IN TEACHING THE FUNCTIONS OF INDUSTRY, THIS COURSE OF STUDY WAS COMPILED AS A RESULT OF THE EPDA INSTITUTE IN INDUSTRIAL AND CAREER DEVELOPMENT AT GEORGIA SOUTHERN COLLEGE. CONTENTS ARE: (1) INTRODUCTION, (2) ORGANIZATION, (3) RESEARCH AND DEVELOPMENT, (4) PRODUCTION, (5) MARKETING, (6) FINANCE AND CONTROL, (7) PERSONNEL ADMINISTRATION, (8) EXTERNAL RELATIONS, AND (9) SECRETARIAL AND LEGAL. EACH SECTION CONTAINS SUGGESTED STUDENT ACTIVITIES, INSTRUCTIONAL AIDS, TEACHER NOTES, AND COUNSELOR INTERACTION IN THE PROGRAM. APPENDED ARE VARIOUS INSTRUCTIONAL AIDS THAY MAY BE USED INCLUDING A LISTING OF NUMEROUS FILMS AND FILMSTRIPS. (GB)

VT 011 775
STEEB, RALPH V.; GEIL, JOHN J.
SAFETY IN INDUSTRIAL ARTS LABORATORIES. BULLETIN 76H-1.

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE.
PUB DATE - MAY69 86P.

DESCRIPTORS - *INDUSTRIAL ARTS; SAFETY EDUCATION; *LABORATORY SAFETY; ACCIDENT PREVENTION; SAFETY EQUIPMENT; SAFETY; *INSTRUCTIONAL MATERIALS

ABSTRACT - A REALLY EFFECTIVE SAFETY PROGRAM IS PRACTICED REGULARLY AND NATURALLY AS PART OF THE DAILY WORK. THIS MANUAL WAS DEVELOPED BY INDUSTRIAL ARTS CONSULTANTS TO HELP THE TEACHER DEVELOP WITHIN EACH STUDENT AN AWARENESS OF SAFETY THAT WILL CARRY THROUGH SCHOOL AND INTO POSTSCHOOL WORK AND RECREATION. THE PURPOSE OF SAFETY EDUCATION IS: (1) TO PROTECT THE STUDENT FROM INJURY WHILE IN THE SCHOOL SHOP OR LABORATORY, AND (2) TO DEVELOP HABITS, ATTITUDES, AND PERCEPTIONS WHICH WILL HELP INSURE HIS SAFETY THROUGHOUT HIS LIFETIME. MAJOR TOPICS INCLUDE: (1) SAFETY AND LIABILITY, (2) CAUSES

OF ACCIDENTS, (3) PROVIDING FOR SAFETY, AND (4) SAFETY RULES, COVERING ALL AREAS OF INDUSTRIAL ARTS. APPENDED MATERIALS INCLUDE A NATIONAL STANDARD SAFETY INSPECTION CHECKLIST, ACCIDENT FORM, A SELECTED BIBLIOGRAPHY, AND LISTINGS OF POSTERS, CHARTS, FILMS AND FILMSTRIPS, AND CATALOGS AND DIRECTORIES. A SELECTED BIBLIOGRAPHY IS APPENDED. (GR)

VT 011 998 ED 047 088
ESHELBY, DON
BIBLIOGRAPHY OF INDUSTRIAL ARTS EDUCATION DOCUMENTS AS LISTED IN ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (AIM) FALL, 1967 TO FALL, 1969.

NORTH DAKOTA UNIV., GRAND FORKS. VOCATIONAL EDUCATION RESEARCH INFORMATION CENTER.
PUB DATE - SEP70 16P.

DESCRIPTORS - *INDUSTRIAL ARTS; *EDUCATIONAL RESEARCH; *BIBLIOGRAPHIES; *INSTRUCTIONAL MATERIALS; *RESOURCE MATERIALS; CURRICULUM PLANNING; PROGRAM PLANNING; PROGRAM DEVELOPMENT

ABSTRACT - THIS BIBLIOGRAPHY PRESENTS APPROXIMATELY 80 CITATIONS OF INSTRUCTIONAL MATERIALS PERTAINING TO INDUSTRIAL ARTS. THE ENTRIES WERE COMPILED FROM "ABSTRACTS OF INSTRUCTIONAL MATERIALS" (AIM) FROM FALL 1967 TO FALL 1969. AIM IS THE QUARTERLY PUBLICATION OF THE OHIO STATE UNIVERSITY WHICH ANNOUNCES THE AVAILABILITY OF INSTRUCTIONAL MATERIALS ACQUIRED AND PROCESSED BY THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) CLEARINGHOUSE ON VOCATIONAL AND TECHNICAL EDUCATION. ARRANGED IN NUMERICAL ORDER BY ACCESSION NUMBER, ENTRIES INCLUDE TITLE, NAME OF AUTHOR OR ORGANIZATION, DATE, NUMBER OF PAGES, AVAILABILITY INFORMATION, AND THE ISSUE OF AIM IN WHICH A BRIEF ABSTRACT APPEARS. ORDERING INSTRUCTIONS ARE INCLUDED. (GR)

VT 012 367
AFFHOLTER, GLENN H., AND OTHERS
ELECTRICITY--ELECTRONICS; CURRICULUM GUIDE FOR AN INTRODUCTORY COURSE.

MICHIGAN STATE DEPT. OF EDUCATION, LANSING.
PUB DATE - 68 32P.

DESCRIPTORS - *CURRICULUM GUIDES; TRADE AND INDUSTRIAL EDUCATION; *INDUSTRIAL ARTS; VOCATIONAL EDUCATION; *ELECTRICITY; *ELECTRONICS; *TEACHING GUIDES; ELECTRICIANS; SAFETY; ELECTRIC CIRCUITS; PROGRAM GUIDES

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY A COMMITTEE, WITH ASSISTANCE FROM THE STATE CURRICULUM COMMITTEE FOR INDUSTRIAL ARTS, FOR THE MICHIGAN DEPARTMENT OF EDUCATION. IT IS FOR TEACHER USE IN DEVELOPING INTRODUCTORY ELECTRICITY-ELECTRONICS PROGRAMS FOR JUNIOR AND SENIOR HIGH SCHOOL STUDENTS. THE BULLETIN IS DESIGNED FOR USE IN COURSES WITH DIFFERENT TIME ALLOTMENTS, AND FOR EXPLORATORY, PREVOCATIONAL, VOCATIONAL, AND SCIENCE ORIENTED COURSES. THE CONTENTS INCLUDE BASIC QUESTIONS ABOUT A PROGRAM, AN OUTLINE OF THE HISTORY OF THE SUBJECT, A UNIT ON SAFETY, AND 27 UNITS ON ELECTRICITY/ELECTRONICS THEORY WITH OBJECTIVES AND SUGGESTED ACTIVITIES PRESENTED IN EACH UNIT. A LIST OF TOOLS, SUPPLIES, AND EQUIPMENT IS APPENDED. (GEB)

VT 012 368
ARENT, WESLEY, AND OTHERS
INDUSTRIAL ARTS PROGRAMING FOR JUNIOR AND SENIOR HIGH SCHOOLS.

MICHIGAN STATE DEPT. OF EDUCATION, LANSING.
PUB DATE - JUL68 20P.

DESCRIPTORS - *INDUSTRIAL ARTS; *PROGRAM DEVELOPMENT; PROGRAM PLANNING; *SECONDARY SCHOOLS; *GUIDELINES; SCHOOL ACTIVITIES; *SCHOOL SHOPS; EDUCATIONAL OBJECTIVES; LABORATORY SAFETY; ORGANIZATION

ABSTRACT - TO HELP SCHOOLS KEEP YOUTH ABREAST OF CURRENT TECHNOLOGICAL DEVELOPMENTS, THIS BULLETIN WAS PREPARED FOR USE BY SCHOOL ADMINISTRATORS AND TEACHERS WHEN DEVELOPING COMPREHENSIVE INDUSTRIAL ARTS PROGRAMS. AIMED AT THE SECONDARY SCHOOLS, THE BULLETIN MAKES NO ATTEMPT TO ITEMIZE SUBJECT MATTER BUT RATHER IDENTIFIES THOSE ITEMS THAT SHOULD BE CONSIDERED IN DEVELOPING PROGRAMS OF INSTRUCTION. THIS INFORMATION INCLUDES: (1) GENERAL SUGGESTIONS FOR INDUSTRIAL ARTS PROGRAMS, (2) SUGGESTIONS REGARDING THE BASIC SUBJECT MATTER AREAS FOR LABORATORY ACTIVITIES ON THE JUNIOR HIGH LEVEL, (3) SUGGESTIONS CONCERNING THE SENIOR HIGH PROGRAM, AND (4) GENERAL PRINCIPLES OF SHOP PLANNING, SHOP SAFETY, STUDENT DIRECTED ORGANIZATION, AND COLLEGE ENTRANCE REQUIREMENTS. (JS)

VT 012 370
MECHANICAL AND ELECTRICAL TECHNOLOGY. RESOURCE GUIDE FOR EFFECTIVE INSTRUCTION IN INDUSTRIAL ARTS. CURRICULUM BULLETIN NO. 138.

MINNESOTA STATE DEPT. OF EDUCATION, ST. PAUL. DOCUMENTS SECTION, MINNESOTA STATE DEPT. OF EDUCATION, ROOM 140, CENTENNIAL BUILDING, ST. PAUL, MINNESOTA 55101.
PUB DATE - 70 121P.

DESCRIPTORS - *CURRICULUM GUIDES; TEACHING METHODS; EDUCATIONAL INNOVATION; *INDUSTRIAL ARTS TEACHERS; *INDUSTRIAL ARTS; RESOURCE GUIDES; *ELECTRICITY; *FLUID POWER EDUCATION; ENGINES; AFFECTIVE OBJECTIVES; COGNITIVE OBJECTIVES; PSYCHOMOTOR OBJECTIVES

ABSTRACT - PREPARED FOR INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE HAS BEEN ORGANIZED FOR EFFICIENT UTILIZATION OF SEVERAL NEWER METHODOLOGICAL APPROACHES TO TEACHING. THE ORDER IN WHICH MATERIAL IS PRESENTED PLACES THE PSYCHOMOTOR, COGNITIVE, AND AFFECTIVE DOMAINS OF LEARNING ON A CONTINUUM WITH IMPLEMENTATION PROCEDURES. ARRANGED IN THREE SECTIONS ON ELECTRONICS, MECHANICAL POWER, AND FLUID POWER TECHNOLOGY, THE GUIDE PRESENTS MATERIAL IN THE CATEGORIES OF: (1) SKILLS STUDENTS WILL BE ABLE TO PERFORM, (2) CONCEPTS STUDENTS WILL UNDERSTAND, (3) APPRECIATIONS STUDENTS WILL

DEVELOP, AND (4) IMPLEMENTATION SUGGESTIONS. SOURCES OF RESOURCE MATERIALS ARE INCLUDED. TWO RELATED DOCUMENTS ARE AVAILABLE AS VT 012 371 AND VT 012 372, ALSO IN THIS ISSUE. (JS)

VT 012 371
MATERIALS TECHNOLOGY. RESOURCE GUIDE FOR EFFECTIVE INSTRUCTION IN INDUSTRIAL ARTS. CURRICULUM BULLETIN NO. 13C.

MINNESOTA STATE DEPT. OF EDUCATION, ST. PAUL. DOCUMENTS SECTION, MINNESOTA STATE DEPT. OF EDUCATION, ROOM 140, CENTENNIAL BUILDING, ST. PAUL, MINNESOTA 55101.
PUB DATE - 69 125P.

DESCRIPTORS - *CURRICULUM GUIDES; TEACHING METHODS; EDUCATIONAL INNOVATION; *INDUSTRIAL ARTS TEACHERS; *INDUSTRIAL ARTS; RESOURCE GUIDES; *PLASTICS; *METALS; WOODWORKING; AFFECTIVE OBJECTIVES; COGNITIVE OBJECTIVES; PSYCHOMOTOR OBJECTIVES

ABSTRACT - PREPARED FOR INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE HAS BEEN ORGANIZED FOR EFFICIENT UTILIZATION OF SEVERAL NEWER METHODOLOGICAL APPROACHES TO TEACHING. THE ORDER IN WHICH MATERIAL IS PRESENTED PLACES THE PSYCHOMOTOR, COGNITIVE, AND EFFECTIVE DOMAINS OF LEARNING ON A CONTINUUM WITH IMPLEMENTATION PROCEDURES. THREE SECTIONS, WOODS, METALS, AND PLASTICS TECHNOLOGY, LIST: (1) SKILLS STUDENTS WILL BE ABLE TO PERFORM, (2) CONCEPTS STUDENTS WILL UNDERSTAND, (3) APPRECIATIONS STUDENTS WILL DEVELOP, AND (4) IMPLEMENTATION SUGGESTIONS. SOURCES OF RESOURCE MATERIALS ARE PROVIDED, AND RELATED DOCUMENTS ARE AVAILABLE AS VT 012 370 AND VT 012 372, ALSO IN THIS ISSUE. (JS)

VT 012 372
VISUAL COMMUNICATION TECHNOLOGY. RESOURCE GUIDE FOR EFFECTIVE INSTRUCTION IN INDUSTRIAL ARTS.

MINNESOTA STATE DEPT. OF EDUCATION, ST. PAUL. CURR-BULL-13A
DOCUMENTS SECTION, MINNESOTA STATE DEPT. OF EDUCATION, ROOM 140, CENTENNIAL BUILDING, ST. PAUL, MINN. 55101.
PUB DATE - 70 82P.

DESCRIPTORS - *CURRICULUM GUIDES; TEACHING METHODS; EDUCATIONAL INNOVATION; *INDUSTRIAL ARTS TEACHERS; *INDUSTRIAL ARTS; RESOURCE GUIDES; *DRAFTING; *GRAPHIC ARTS; AFFECTIVE OBJECTIVES; COGNITIVE OBJECTIVES; PSYCHOMOTOR OBJECTIVES

ABSTRACT - PREPARED FOR INDUSTRIAL ARTS TEACHERS, THIS CURRICULUM GUIDE HAS BEEN ORGANIZED FOR EFFICIENT UTILIZATION OF SEVERAL NEWER METHODOLOGICAL APPROACHES TO TEACHING. THE ORDER IN WHICH MATERIAL IS PRESENTED PLACES THE PSYCHOMOTOR, COGNITIVE, AND AFFECTIVE DOMAINS OF LEARNING ON A CONTINUUM WITH IMPLEMENTATION PROCEDURES. TWO SECTIONS, DRAFTING AND GRAPHIC ARTS TECHNOLOGY, LIST: (1) SKILLS STUDENTS WILL BE ABLE TO PERFORM, (2) CONCEPTS STUDENTS WILL UNDERSTAND, (3) APPRECIATIONS STUDENTS WILL DEVELOP, AND (4) IMPLEMENTATION SUGGESTIONS. SOURCES OF RESOURCE MATERIALS ARE PROVIDED AND RELATED DOCUMENTS ARE AVAILABLE AS VT 012 370 AND VT 012 371, ALSO IN THIS ISSUE. (JS)

VT 012 741
BRAUN, DONALD, AND OTHERS
WOODWORK 1-2.

MILWAUKEE PUBLIC SCHOOLS, WIS. INDUSTRIAL ARTS DEPT.
PUB DATE - 62 42P.

DESCRIPTORS - *TEACHING GUIDES; CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; JUNIOR HIGH SCHOOLS; TESTS; VOCABULARY DEVELOPMENT; *LABORATORY SAFETY

ABSTRACT - DEVELOPED BY THE DIVISION OF CURRICULUM AND INSTRUCTION OF THE MILWAUKEE PUBLIC SCHOOLS, THIS TEACHING GUIDE WAS INTENDED FOR STUDENT AND TEACHER USE IN PRESENTING BASIC WOODWORKING FUNDAMENTALS IN THE JUNIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAMS. THE COURSE CONTENT, PLANNED ON THE BASIS OF 275 MINUTES PER WEEK, INCLUDES: (1) GENERAL INFORMATION CONCERNING INDUSTRIAL ARTS, (2) INTRODUCTION TO THE COURSE, (3) DIAGNOSTIC TEST, AND (4) 18 UNITS ON THE FUNDAMENTALS OF WOODWORKING WITH EACH UNIT CONTAINING A FIVE-COLUMN GUIDE. A TYPICAL BILL OF MATERIALS, PROCEDURE PLAN, TESTS, VOCABULARY WORDS, AND A BIBLIOGRAPHY ARE APPENDED. (GEB)

VT 012 748
ANDERSON, AGNER, AND OTHERS
DRAFTING (INSTRUCTIONAL SUPPLEMENT).

MILWAUKEE PUBLIC SCHOOLS, WIS. DEPT. OF ELEMENTARY AND SECONDARY EDUCATION.
PUB DATE - 69 106P.

DESCRIPTORS - *VOCATIONAL EDUCATION; SUPPLEMENTARY TEXTBOOKS; *RESOURCE MATERIALS; *DRAFTING; *DRAFTSMEN; SECONDARY EDUCATION; INDUSTRIAL ARTS; *TRADE AND INDUSTRIAL EDUCATION

ABSTRACT - DEVELOPED BY DRAFTING INSTRUCTORS IN THE MILWAUKEE PUBLIC SCHOOLS IN COOPERATION WITH A CURRICULUM ADVISORY COMMITTEE, THIS CURRICULUM SUPPLEMENT IS A COLLECTION OF INDIVIDUAL RESOURCE UNITS INCLUDING BIBLIOGRAPHIES FOR USE IN JUNIOR HIGH AND HIGH SCHOOLS. THE PUBLICATION, DESIGNED TO ASSIST INSTRUCTORS OF DRAFTING, PRESENTS CURRENT INDUSTRIAL PRACTICES WHICH INCLUDE: (1) LEVELS OF DRAFTING OCCUPATIONS, (2) KINDS OF DRAFTING ACTIVITIES, (3) STANDARDS, (4) DOCUMENTATION, (5) ENGINEERING DRAWING CHANGES, (6) DIMENSIONING, (7) DRAWING MEDIA, AND (8) MICROFILMING. FOR THE CONVENIENCE OF INSTRUCTORS WHO MIGHT EXPERIENCE DIFFICULTY IN SECURING PRINTS FROM INDUSTRY, VARIOUS INDUSTRIAL PRINTS ARE APPENDED. (LM)

VT 012 752
MECHANICAL DRAWING 1-4. A GUIDE FOR INDUSTRIAL ARTS TEACHERS.

MILWAUKEE PUBLIC SCHOOLS, WIS. DEPT. OF SECONDARY CURRICULUM AND INSTRUCTION.

PUB DATE - 66 51P.

DESCRIPTORS - *CURRICULUM GUIDES; *INDUSTRIAL ARTS; *DRAFTING; *TEACHING GUIDES; ORTHOGONAL PROJECTION; BIBLIOGRAPHIES; SECONDARY GRADES

ABSTRACT - THIS CURRICULUM GUIDE IS FOR INSTRUCTOR USE IN TEACHING THE FUNDAMENTALS OF MECHANICAL DRAWING IN SECONDARY SCHOOL INDUSTRIAL ARTS, AND WAS DEVELOPED BY THE DIVISION OF CURRICULUM AND INSTRUCTION OF THE MILWAUKEE PUBLIC SCHOOLS. THE OBJECTIVES ARE DESIGNED TO ACQUAINT THE STUDENT WITH THE DRAFTING LANGUAGE OF INDUSTRY AND TO DEVELOP SOME BASIC SKILLS IN USING THAT LANGUAGE. THE MATERIAL, TO BE USED OVER A 2-YEAR PERIOD, IS PRESENTED IN A SEVEN-COLUMN FORMAT AND INCLUDES TEXTBOOK ASSIGNMENTS. A LIST OF SUPPLEMENTARY AIDS, A SAMPLE MEASURING TEST, AND A BIBLIOGRAPHY ARE INCLUDED. (GEB)

VT 012 754
BRAUN, DONALD, AND OTHERS
7B WOODWORK.

MILWAUKEE PUBLIC SCHOOLS, WIS. INDUSTRIAL ARTS DEPT.
PUB DATE - 62 43P.

DESCRIPTORS - *TEACHING GUIDES; CURRICULUM GUIDES; *INDUSTRIAL ARTS; *WOODWORKING; JUNIOR HIGH SCHOOLS; TESTS; VOCABULARY DEVELOPMENT

ABSTRACT - THIS TEACHING GUIDE, DESIGNED FOR TEACHER AND STUDENT USE IN THE INDUSTRIAL ARTS WOODWORKING PROGRAMS OF JUNIOR HIGH SCHOOLS, WAS DEVELOPED BY THE DIVISION OF CURRICULUM AND INSTRUCTION OF THE MILWAUKEE PUBLIC SCHOOLS. THE MATERIAL IS PLANNED ON THE BASIS OF 275 MINUTES PER WEEK. INCLUDED IN THE COURSE ARE 15 UNITS COVERING SOME OF THE FUNDAMENTALS OF WOODWORKING, WITH EACH UNIT BROKEN INTO A FIVE-COLUMN GUIDE ORGANIZED BY: (1) BASIC SKILLS, (2) BASIC UNDERSTANDINGS, (3) SUGGESTED INSTRUCTIONAL AIDS, (4) SUGGESTED PROJECTS, AND (5) INSTRUCTOR NOTES. INSTRUCTION SHEETS, TESTS, VOCABULARY TERMS, AND A REFERENCE LIST ARE APPENDED. (GEB)

VT 012 759
INDUSTRIAL ARTS AEROSPACE FOR INTERMEDIATE AND JUNIOR HIGH SCHOOLS. EXPERIMENTAL MATERIALS, FIRST DRAFT.

NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y. BUREAU OF CURRICULUM DEVELOPMENT.
PROJECT NO. 5511.
PUB DATE - AUG70 135P.

DESCRIPTORS - *INDUSTRIAL ARTS; *STUDENT PROJECTS; *INSTRUCTIONAL MATERIALS; *RESOURCE MATERIALS; *EXPERIMENTAL CURRICULUM; CURRICULUM GUIDES; AEROSPACE TECHNOLOGY; INDUSTRIAL EDUCATION; INTERMEDIATE GRADES; JUNIOR HIGH SCHOOLS; ILLUSTRATIONS; INDIVIDUALIZED INSTRUCTION

ABSTRACT - THIS 20-WEEK EXPERIMENTAL CURRICULUM BULLETIN FOR INTERMEDIATE AND JUNIOR HIGH SCHOOLS WAS PREPARED BY THE NEW YORK CITY BUREAU OF CURRICULUM DEVELOPMENT. A SUGGESTED PROGRAM SCHEDULE OUTLINES TOPICS ON INTRODUCTION TO FLIGHT, SUPPORT SYSTEMS, AND SPACE AND ROCKETS, INCLUDING SUGGESTED PROJECTS, INSTRUCTIONAL CONTENT, AND RELATED INFORMATION FOR EACH TOPIC. DETAILED INFORMATION IN THE FORM OF TEXTUAL MATERIAL AND DIRECTIONS FOR MAKING A WIND TUNNEL AND OTHER STUDENT PROJECTS IS PROVIDED FOR THE INTRODUCTION TO FLIGHT TOPIC. ADDITIONAL PROJECT DIRECTIONS AND INFORMATION ARE APPENDED. (SB)

VT 012 899
WOODWARD, ROBERT L.; MYERS, NORMAN L.
INDUSTRIAL ARTS POWER MECHANICS. APPLYING SCIENTIFIC PRINCIPLES TO POWER, ENERGY, AND FORCE.

CALIFORNIA STATE DEPT. OF EDUCATION, SACRAMENTO.
PUB DATE - 70 145P.

DESCRIPTORS - *STATE CURRICULUM GUIDES; *INDUSTRIAL ARTS; *POWER MECHANICS; *SCIENTIFIC PRINCIPLES; *CURRICULUM DEVELOPMENT; SECONDARY GRADES; PUBLIC SCHOOLS; COURSE CONTENT; TRADE AND INDUSTRIAL EDUCATION; JUNIOR HIGH SCHOOLS

ABSTRACT - THIS CURRICULUM GUIDE WAS DEVELOPED BY AN NDEA INDUSTRIAL ARTS-SCIENCE CURRICULUM COMMITTEE AND AN NDEA INDUSTRIAL ARTS-SCIENCE EDITORIAL COMMITTEE DURING WORKSHOPS CONDUCTED IN CALIFORNIA AND IT IS DESIGNED FOR INSTRUCTOR USE IN PREPARING OR REVISING POWER MECHANICS COURSES IN JUNIOR OR SENIOR HIGH SCHOOL INDUSTRIAL ARTS. THE MATERIAL COMPLIES WITH THE OBJECTIVES OF THE INDUSTRIAL ARTS PROGRAMS IN CALIFORNIA SCHOOLS, AND THE CONTENT APPLIES THE PRINCIPLES RELATING TO POWER, ENERGY, AND FORCE. SECTIONS ARE: (1) NATURAL POWER, (2) MECHANICAL POWER, (3) STEAM POWER, (4) THERMAL POWER, (5) ELECTRICAL POWER, (6) HYDRAULIC POWER, AND (7) PNEUMATIC POWER. COURSE OUTLINES FOR POWER AND AUTOMOTIVE MECHANICS, BATTERY TERMINOLOGY, AND ASSIGNMENT SHEETS ARE APPENDED, AND SELECTED REFERENCES ARE INCLUDED. (GEB)

VT 013 061
INDUSTRIAL ARTS FOR IOWA SCHOOLS.

IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.
PUBLICATIONS SECTION, DEPARTMENT OF PUBLIC INSTRUCTION, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ($1.00).
PUB DATE - 69 171P.

DESCRIPTORS - *INDUSTRIAL ARTS; METALS; POWER MECHANICS; DRAFTING; PLASTICS; ELECTRICITY; WOODWORKING; *LEARNING ACTIVITIES; GRAPHIC ARTS; *RESOURCE MATERIALS; EVALUATION; *STATE CURRICULUM GUIDES; *PROGRAM DESIGN; EQUIPMENT; SECONDARY GRADES

ABSTRACT - DEVELOPED BY THE IOWA DEPARTMENT OF PUBLIC INSTRUCTION WITH THE COOPERATION OF EDUCATIONAL PERSONNEL, THIS CURRICULUM GUIDE IS DESIGNED FOR THE INSTRUCTOR'S USE IN PLANNING INDUSTRIAL ARTS PROGRAMS AND ACTIVITIES. A DEFINITION, PHILOSOPHY, AND

SPECIFIC OBJECTIVES FOR INDUSTRIAL ARTS ARE STATED. OTHER UNITS CONSIDERED IN THE FIRST PART OF THIS DOCUMENT INCLUDE: (1) REQUISITES OF QUALITY INDUSTRIAL ARTS, (2) SCOPE AND SEQUENCE OF INDUSTRIAL ARTS PROGRAMS, (3) SELECTED ASPECTS OF ORGANIZATION AND ADMINISTRATION, (4) PURPOSEFUL TEACHING, (5) MEASUREMENT OF STUDENT ACHIEVEMENT, AND (6) USEFUL INFORMATION FOR THE TEACHER AS A PROFESSIONAL. THE SECOND PART CONTAINS BACKGROUND INFORMATION, LEARNING ACTIVITIES, SELECTED INSTRUCTIONAL AIDS OR SOURCES, EQUIPMENT, AND SUPPLIES OF TOOLS AND EQUIPMENT FOR EIGHT SPECIFIC AREAS OF INDUSTRIAL ARTS. (GEB)

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VT 000 980	*ED 041 177	VT 006 262	*ED 030 770	VT 008 041	*ED 034 074
VT 001 200	*ED 041 177	VT 006 323	*ED 030 770	VT 008 052	*ED 034 074
VT 001 258	*ED 041 177	VT 006 430	*ED 037 585	VT 008 071	*ED 034 074
VT 001 359	*ED 045 856	VT 006 452	*ED 034 074	VT 008 072	*ED 034 074
VT 001 479	*ED 028 305	VT 006 462	*ED 037 585	VT 008 156	*ED 034 074
VT 001 686	*ED 037 585	VT 006 597	*ED 041 177	VT 008 184	ED 033 193
VT 001 858	*ED 020 442	VT 006 598	*ED 037 585	VT 008 219	*ED 034 074
VT 001 958	*ED 042 931	VT 006 650	*ED 037 585	VT 008 238	*ED 032 434
VT 002 002	ED 021 963	VT 006 661	*ED 034 074	VT 008 251	*ED 034 074
VT 002 009	ED 022 843	VT 006 765	*ED 037 585	VT 008 253	*ED 034 074
VT 002 032	*ED 013 339	VT 006 976	*ED 032 434	VT 008 255	*ED 034 074
VT 002 112	*ED 045 856	VT 006 977	*ED 032 434	VT 008 256	*ED 034 074
VT 002 345	*ED 045 856	VT 006 978	*ED 032 434	VT 008 259	ED 039 315
VT 002 504	*ED 034 074	VT 006 979	*ED 032 434	VT 008 268	*ED 037 585
VT 002 506	*ED 028 305	VT 006 980	*ED 032 434	VT 008 269	*ED 037 585
VT 002 559	ED 032 381	VT 006 981	*ED 032 434	VT 008 270	*ED 037 585
VT 002 650	*ED 045 856	VT 006 982	*ED 032 434	VT 008 328	*ED 037 585
VT 002 778	ED 022 849	VT 006 983	*ED 032 434	VT 008 381	*ED 032 434
VT 002 860	*ED 030 770	VT 006 984	*ED 032 434	VT 008 382	*ED 032 434
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VT 003 271	*ED 028 305	VT 006 989	*ED 041 177	VT 008 384	*ED 032 434
VT 003 286	*ED 022 971	VT 006 992	*ED 041 177	VT 008 385	*ED 032 434
VT 003 553	*ED 045 856	VT 006 998	*ED 041 177	VT 008 407	*ED 032 434
VT 003 713	*ED 020 442	VT 007 001	*ED 030 770	VT 008 465	*ED 032 434
VT 003 977	*ED 020 442	VT 007 002	*ED 030 770	VT 008 537	*ED 037 585
VT 003 978	*ED 020 442	VT 007 011	*ED 041 177	VT 008 562	ED 033 195
VT 004 343	*ED 049 382	VT 007 263	*ED 030 770	VT 008 664	*ED 041 177
VT 004 592	ED 020 349	VT 007 334	*ED 034 074	VT 008 796	*ED 042 931
VT 004 596	*ED 022 971	VT 007 360	*ED 041 177	VT 008 872	*ED 037 585
VT 004 636	*ED 022 971	VT 007 363	*ED 045 856	VT 008 993	*ED 037 585
VT 004 684	*ED 034 074	VT 007 388	*ED 030 770	VT 009 072	ED 031 594
VT 004 806	*ED 020 442	VT 007 459	ED 024 822	VT 009 081	*ED 037 585
VT 004 851	*ED 022 971	VT 007 464	*ED 034 074	VT 009 194	*ED 037 585
VT 005 128	*ED 028 305	VT 007 685	ED 028 259	VT 009 281	*ED 037 585
VT 005 164	*ED 022 971	VT 007 689	*ED 034 074	VT 009 288	*ED 045 856
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